31 Hot, new 32-bit games reviewed & rated

NEXT
GENERATION

Leading edge computer & video **games**

May 1996

PlayStation's Second Coming
Revealed: the games that will fight Nintendo 64

Tenka
Takes the Doom genre to the next dimension, p.48

Formula One
Accelerates past Ridge Racer to lead the 32-bit race, p.50

Wipeout 2
Bigger, faster, better, p.55

Destruction Derby 2
More tracks... and monster trucks? P.54

Capcom
Why bringing Ken and Ryu to the 3D world is harder than you think

Future Joysticks
Coming to a sweaty palm near you...

Scared of Nintendo? Not Sony.

Psygnosis' second-generation games push 32-bit to the max

volume two

17

$4.99 U.S. $5.99 CAN.

05 >

0 09281 02585 1

Tenka: the up-and-coming PlayStation title from Psygnosis that promises to rival Id's Quake as the game to rejuvenate the first-person shooting genre

Made in Japan

Sunnyvale, CA, US. **Atari's** Jaguar is out of the next-generation race.

Redwood City, CA, US. After the failure of **3DO**'s Multiplayer, Trip Hawkins & Co. now claim that the whole 32-bit generation is **doomed to fail.**

The **war** for the **hearts and minds** of **US** videogamers is once again being fought solely by subsidiaries of Japanese corporations. Sure, the homegrown PC game scene continues to thrive. But in the console business, Japan's **business** skills have triumphed once again.

But this time around, **there's a twist.** Increasingly, the Japanese giants of **Nintendo, Sega, and Sony** are battling with European and American products and expertise as their weapons.

The graphic wizards at **SGI's** Mountain View, CA, US headquarters **sold their secrets** to Nintendo. **M2** (previously **America's best shot** at stealing back the videogaming initiative) is now in the hands of the Japanese giant Matsushita. And now, after the disappointing *Ridge Racer Revolution* and *Toshinden 2*, **PlayStation** will fight **Nintendo 64** with games made in Europe and the US.

Of course, few would argue that the Japanese dominance is slipping. As the world looks to the unveiling of ***Virtua Fighter 3*** (p.14) and the imminent arrival of *Mario 64* (p.6), there is little doubt that **Yu Suzuki** and **Shigeru Miyamoto** still lead the world.

But we're catching up...

NEXT *GENERATION*

NEXT GENERATION

May 1996

So Howard, what's the excuse this time?

Next Generation didn't have to go looking for Nintendo of America's president and CEO Howard Lincoln to grant his third interview in nine months. This time, he personally came to see us. The topic? Three guesses, and the first two don't count

Get a Grip! Joysticks: past, present, and future

All electronic games have one thing in common: some device by which players interact with the game. **Next Generation** examines controllers past and present, then looks to the future to see how new technologies may change the very way you play games

Alphas: 15 games previewed

An exclusive look at Tenka and Formula One, two new PlayStation projects from the company that brought you Destruction Derby and Wipeout • An interview with Capcom's Japanese software chief • Plus, Red Baron II, Power Play Hockey, 3DO's Decathlon and more

14

News
Virtua Fighter 3 and Sega's long-awaited Model 3 board debuts • Next Generation reports on the ACME arcade trade show • Saturn and PlayStation sales figures — who should you believe!

90

Finals: 31 games reviewed
Reviews the way you've come to expect them: no coddling, no soft punches, no compromise. If you want to know what to spend your hard-earned money on, start here or get burned

If the suspense doesn't kill you, something else will.

Your team should not be misled by the neat and orderly appearance of this isolated mansion. A major corporation's been conducting questionable research here. You'll soon discover the results of some very, very careless experiments.

From hyper-realistic 3D lighting and an ominous CD quality sound-track and special effects, to unique action perspectives, this intense drama unfolds, building terror and suspense with every new room you wander through.
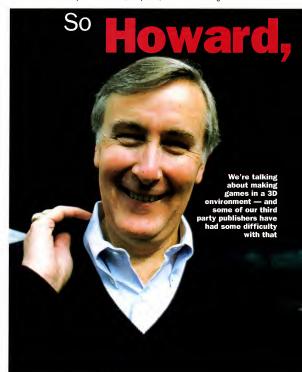
Fight or flight? When you're under-powered and on the run, split-second decision making abilities are key. Discover and arm yourself with anything you find knives, pistols, shotguns, flame-throwers and more.

This twisted 32-bit polygon-based blood bath isn't limited to gleaming dining rooms and endless polished hallways. Answers are found in darkest corners of the estate cemetery, crumbling guest houses, and a mysterious tower.

from initial reconnaissance team. No backup. You are on your own. **CAPCOM**

RESIDENT EVIL

It's deja vu. Again. In **NG 8, Next Generation** asked Nintendo of America's President Howard Lincoln to explain why Ultra 64 (as Nintendo's 64-bit console was known at the time) had slipped from a 1995 release to April of 1996. Now, it's April '96, and there's still no sign of Nintendo 64…

So Howard,

We're talking about making games in a 3D environment — and some of our third party publishers have had some difficulty with that

what's
the excuse
this time?

Talking about Nintendo 64's delays is becoming an increasingly boring, yet necessary, part of every videogame magazine's duties. Because of this month's last minute *Virtua Fighter 3* coverage, and the fact that — to be brutally honest — Nintendo 64's delay isn't the most scintillating of topics, this month's interview is a meager three pages long.*

Of course, we're being a little cruel to Howard Lincoln and Nintendo. The bottom line is that Nintendo is completely correct in waiting until it's properly ready before launching Nintendo 64. It's just more than a little disappointing, that's all. And the news of Nintendo 64's delay in Japan to June 23 was a surprise, even to those of us who had made the prediction that an April US launch would be impossible.

So why the delay? And, as PlayStation and Saturn games continue to improve, will Nintendo 64 offer any improvement over its competition when it finally does appear? **Next Generation** met with Howard Lincoln, once again, to find out.

Manufacturing problems

NG: So why has Nintendo 64's launch been delayed until September 30?

Howard: It's primarily a production problem — just a supply-and-demand problem. I think the main problem is in the production of an adequate supply of the two key chips in the hardware: the 64-bit CPU and the reality coprocessor. Getting that produced in quantities sufficient enough to meet what we regard as explosive demand in the Japanese market is difficult.

NG: You must have anticipated a large demand?

Howard: When we went into the Shoshinkai Show, we were shooting for a simultaneous launch [in all countries at the same time]. We'd never

ever done a simultaneous launch before, but we thought we could do it. But, when we measured the demand after the show, particularly the demand in Japan — which we had a way of measuring — it just became very apparent that if we were to stick to a simultaneous launch simply because we had said that's what we were shooting for, we'd end up shooting ourselves in the foot.

NG: Why would it be shooting yourself in the foot?

Howard: If we had stuck with the April launch in all three markets [US, Japan, and Europe], I think we would have ended up dribbling out a little bit in each — with not enough to meet the demand. This would cause all sorts of aggravation, not only on the consumer level but at the retail level, which is equally important to us. The retailers don't like a launch with not enough product because then they get into arguments with us about fair allocations. "Well, why did he get this? I saw this at Toy R Us."

Albert Einstein could start programming for Sega and Sony and they're not going to be able to make [Nintendo 64] games

How come I don't have any?" That kind of stuff. And because of our relationships with those retailers, we can't afford to do that in any market.

NG: Are you hinting that you don't want the same problems that Sega had, with its surprise launch of Saturn in May of last year?

Howard: Sega made a calculated decision to do what it did, but my feedback says that a lot of retailers were not too happy about it. I'm sure Sega had good reasons for what it did, and I'm not taking shots at Sega, I'm just saying that it's an

* Next month's interview promises to be a much more exciting affair, as Microsoft's founder Bill Gates occurs in the glare of **Next Generation**'s spotlight

talking

example of what can happen if the launch is not well done [i.e. with the full support of retailers].

So are the games ready?

NG: Seemingly everyone else is saying that Nintendo doesn't have any manufacturing problems at all, and that the real story is that the games simply wouldn't have been ready for an April release. Is this the case?

Howard: I think that the three games that, for example, Mr. Yamauchi indicated he was going to launch with [*Mario 64*, *PilotWings 64*, and *Habu Shogi*, a chess game] would have been done. I think we would have had a few more for the U.S. had we gone in April but, certainly, there's no

Giving our second-party developers and third-party publishers additional time is pure music to their ears

question that giving our second-party developers and third-party publishers additional time is pure music to their ears.

I'm not hearing of any disappointment from retailers, third-party publishers, second-party publishers, in-house developers at Nintendo, or Nintendo employees. I do sense that there will be some disappointment on gameplayers' part, and that's understandable. We're not in the business of disappointing them. But, as Mr. Miyamoto said, "I don't want to work for a company that forces me to do something that I'm simply not comfortable with." Can't argue with that.

NG: Would three games have been enough?

Howard: The answer is wait and see. How many people are going to buy these things and how many people are going to be satisfied with an initial three games? It depends on how good the three games are.

NG: So you'd deny rumors that making games for Nintendo 64 has proved to be more difficult than developers had anticipated? Or, that there's been a shortage of development kits given to the people who are supposed to be coming up with these games?

Howard: I think part of the problem that you're speaking about is that it has been difficult in the last year to get an adequate number of development boards out there to meet demand. And there's no question that the development of software for Nintendo 64 requires a greater investment, and is a much greater challenge [than developers are used to]. And not only because of the technology that we're dealing with, but also because we're talking about making games in a 3D environment — and some of our third-party publishers have had some difficulty with that, but it's perfectly understandable. Some have done extremely well also. I think those problems are pretty much behind us.

NG: And are you confident that these delays, and the rumors of development problems, won't have put off other game developers from making games for Nintendo 64?

Howard: The reality is that our third-party publishers [and game developers] are all businessmen. Their decision to support or not support a hardware platform is based almost exclusively on the installed base and we have the obligation to create that installed base. And if we create an installed base of [millions] of Nintendo 64s, guess what? There will be adequate third-party support for that platform. If, on the other hand, we shoot ourselves in the foot, then, there will not be. And it's really our obligation.

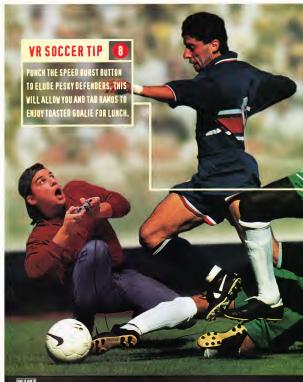## Meanwhile, back at Sega's and Sony's headquarters...

NG: Obviously, Sega and Sony will make the most of their extended head start. Just how big do you anticipate their lead will be? What is the Nintendo line on how many Saturns and PlayStations have been sold so far?

Howard: I cannot say that we are completely objective but, we are probably more objective on [the subject of sales figures] than anything else that we might say about our competitors. If you examine the '95 TRST data, our best estimate of sell-through — which is the only number that counts, stuff that's actually been sold to consumers, and not just boxes sitting on store shelves — our best estimate is probably in the area of, and I'll give you a range, 450 to 500 thousand for Sony, and 150 to 200 thousand for Sega. Clearly, Sony sold more than Sega in '95.

NG: But each month of N64's delay gives Sega and Sony a chance to improve their games. Is there a danger than when N64 finally launches, the games won't be any better than its 32-bit competitors?

Howard: That's not going to happen. Software for the 32-bit platforms is going to get better. It's not going to get worse. You have to anticipate that in '96, '97, and '98 it's going to get better and better, just as it did on Super NES. But we have a high degree of confidence the software for Nintendo 64 is a quantum leap because of the technology and, quite frankly, because of the time we've taken. Albert Einstein could start programming for Sega and Sony and they're not going to be able to make [Nintendo 64] games because the technology is not there.

NG: So, Nintendo 64 will be available in US stores on September 30? No more changes?

Howard: Look, we're not in the habit of putting full page ads in *U.S.A. Today* and telling consumers it's September 30 when it's not going to be September 30. And if it isn't, you guys are going to come down on us and let us know about it. So, I think that when we picked that date we had a pretty high degree of confidence that it was going to be good.

VR SOCCER TIP 8

PUNCH THE SPEED BURST BUTTON TO ELUDE PESKY DEFENDERS. THIS WILL ALLOW YOU AND TAB RAMOS TO ENJOY TOASTED GOALIE FOR LUNCH.

For more VR Soccer Tips and free demo, visit our web site at http://www.vrsports.com
Or, purchase a PC CD-ROM interactive preview at a participating retailer near you.

INTRODUCING VR SOCCER '96™

Where the bicycle kicks, the yellow cards and even the burnt goalies are for real.

It's just a game like English soccer fans are just a little enthusiastic. Say hello to the next generation of soccer. *Video Games* magazine calls VR Soccer '96™

"The best 32-bit soccer game..."

With smooth, fast camera action, it's the only soccer game you can play from anywhere and everywhere on the field. You can select from 44 international teams and play virtually any position. Plus, up to four players can play on one system with a network option for up to twenty players on the PC. VR Soccer '96™ Now this is a game you can get into.

Virtual FieldVision™ allows you to play in real time from any camera perspective, including first person.

Interactive motion capture means you get real-time player movement with ultimate player control.

Realistic polygon-based figures that look and play like the world's best, because they are.

VR SPORTS™

THE DIFFERENCE IS REAL.™

news

The first and best in hard-hitting news and analysis

Model 3: Sega affirms arcade supremacy

Virtua Fighter 3 redefines the state-of-the-3D art, leaving its rivals eating dust

The *VF3* characters' faces have an incredible degree of animation. Even their pupils move to follow opponents around the arena

Sega's unveiled its new Model 3 technology and *Virtua Fighter 3* (above left) made jaws drop and eyes bulge. A constant running demo permitted four lucky individuals to briefly play one stage of the game (including one NG writer)

Durai was one of two characters that Sega made controllable briefly during the event

Once again, an important Japanese arcade show has been eclipsed by the individual efforts of industry giants Namco and Sega. Last year's JAMMA event saw the two finishing on equal ground, virtually matching each other, game for game. At the Arcade Operators' Union show held outside Tokyo in late February, however, Sega was undoubtedly the dominant force, presenting several highly anticipated titles, as well as its next generation of 3D coin-op technology.

Without question, AM2 provided the main attraction of the show, unveiling *Virtua Fighter 3* and officially introducing the new Model 3 board,

which delivers more than three times more polygons than its predecessor. This was a surprise move considering Model 3 development has been significantly delayed over the past year or so. It was previously thought the system would not receive a premier until JAMMA in September.

As for *VF3*, before the show it was unknown whether the game would be presented in rolling or playable demo form. In the end, both were present, but the honor of actually playing the new game was given to just four Japanese gameheads (a *Next Generation* correspondent included) on the first morning of the event, with

Yu Suzuki — head of the Model 3 and *VF3* projects within AM2

Genuine evidence of the rendering performance of Lockheed Martin's R3D technology — Sega can take geometry from its own series of CG character portraits (far left) and render it in realtime and 60 frames per second...

only two selectable characters: Jacky and Dural (Virtua Fighter 2's boss).

Despite these limitations, the playable demo fulfilled its purpose — to prove how identical the running game was to the immaculate noninteractive demos shown throughout the event.

Most importantly, Virtua Fighter 3 represents the latest breakthrough in the development of realtime 3D graphics. The characters' faces, for example, have an incredible degree of animation; their pupils move to follow opponents around the arena and their

mouths can grimace and snarl (in some cases revealing teeth). To accentuate this growing level of humanity, each fighter's breathing is visible and, after performing a particularly demanding attack, their chests expand and contract to accentuate the physical exertion.

The game features 12 characters, all of which were shown in the demo individually exhibiting their fighting techniques. Of the two new characters, one is a huge fat man whose fat wobbles when he's hit, while the other is a female fighter named Aoi (which translates to Deep Blue), who

Model 3 tech specs

Host CPU: Power PC 603C

Resolution: 496x384; 640x480 (with Z-buffer and noninterlace)

Graphics: geometry engine averaging 1m polygons/sec
Renderer — 60m polygons/sec
24-bit textures
Micro-textures
Trilinear Interpolation

Shading: High specular Gouraud shading, fix shading and flat shading
Texture and edge multilayered anti-aliasing

Lighting: parallel lights, four spotlights, pinpoint spotlights

Special effects: zoning, fog; 32 levels of translucency

Sound: SCSP x 2 (same chip as used in Saturn)
16-bit CPU — 68EC000
Sampling rate — 44.1 kHz
64 voices, two stereo pairs MIDI interface

Sega's Model 3 board is still unfinished, which explains why Sega only presented a brief interactive demonstration of its hardware. As detailed previously in NG 11, the board is based around Lockheed Martin's R3D/PRO-1000 chip, which is capable of rendering 750,000 textured, shaded, fogged, and anti-aliased polygons every second. Model 3 uses a Power PC front end and two R3D/PRO-1000s in parallel to give a sustained average performance of over one million polygons/sec. This arrangement means that the main CPU isn't disturbed by graphics processing and is free to compute game code. In fact, Sega's new board is so advanced that VF3's characters have more polys in their heads than VF2's had in their whole bodies. Awesome.

Durel's incredibly reflective body makes use of the R3D's Gouraud shading and 24-bit texturing. Conversions to the Saturn could be more then tricky

13

The licensing of its Model 2 technology to industry also-rans Tecmo and Jaleco has enabled Sega to transfer its high-end efforts onto Model 3. *Quad Or Alive* (above), *Super GT 24h* (far right)

practices Aikido, is dressed in a pink traditional kimono, and who has some incredibly powerful throwing moves. Of the old characters, Dural is an especially impressive update with a totally reflective body, mimicking the T1000 in *Terminator 2*.

In terms of backgrounds, all are resplendent with luscious texture mapped detail. Jacky's stage was

Virtua Fighter Kids

shown off in the playable demo and takes place in an impressive semi-constructed building. Here, the ground is actually translucent, enabling some of the camera angles to be placed below the fighters. Also, there's a quaint garden backdrop, snow stages, and a small island inhabited by Jeffry.

The graphic quality in *VF3* provides the logical progression in a series which has gone from simple polygons (180,000 polygons per second), to angular textures (300,000 pps), to realistic life-like figures (1 million pps). The characters' bodies

are now so well constructed the fighters all bear a close resemblance to their CG portraits — which should come as no surprise given that CG portrait data was imported into the actual game. Consequently, the game looks and runs like a particularly good, and fast, prerendered sequence.

As for the crowd reaction, the *VF3* stand attracted so many people **Next Generation**'s photographer found it tough to get within 50 yards of the exhibit throughout the whole show. The bad news is *VF3* won't be out until much later in the year, although officials have said it will arrive in August or September.

Not content with showcasing *VF3* and Model 3, AM2 were also presenting two much-hyped Model 2 titles. *Sonic The Fighters*, now replete with all its characters, combines basic *Virtua Fighter* moves with Sonic characteristics such as spins, stars, and helicopter jumps. The graphics are suitably colorful, cartoony and, as with *VF3*, character movement is extremely fluid. Perhaps the game's most interesting feature is the new morphing technique employed for some special moves — characters can change shape and extend their limbs — a feature perhaps inspired by *Street Fighter 2*'s Dahlsim or any of the X-Men characters.

Virtua Fighter Kids (*Kizu*), one of the more bizarre titles to be presented

A real life Pai (top) tries her skills at *Sonic The Fighters*, another new Model 2 curiosity

AM3's reputation for quality was upheld at AOU with the superb *Gun Blade NY* — a helicopter-based shooter with superb graphics and a feedback gun

ST-V games were thin on the ground but AM3's hi-res *Decathlete* boded well for Saturn owners

Tokyo Wars is Namco's latest Super System 22 coin-op and was arguably its best game at the show. Featuring head-to-head battle (two-on-two or one-on-one, each player is equipped with between 12 to 30 tanks and has to destroy the opponent's arsenal

Namco's Prop Cycle is the fantastical 3D flight... on a bike. The player must peddle to stay up

Victory Lap is Namco's follow-up to Ace Driver. Now, if only this had been System 23...

Following *Alpine Racer* comes a snowboarding equivalent from Namco

at the show, features all the fighters from *VF2* as well as a strictly identical selection of moves. The big difference, of course, is that in *VF Kids*, all the characters are presented as cute, large-headed children (or super-deformed as the Japanese — quite gruesomely — love to term it). Along with a few new ST-V ("Titan") titles — *Funky Head Boxers*, *Decathlete*, *World Series Baseball* — *VF Kids* was by far the standout. The game also features such shameless product placement as Jacky drinking from a can labeled "Java Tea" (a famous Japanese brand name) when he wins a bout. This is an increasingly common occurrence in Japanese videogame titles. And it doesn't require too much imagination to see a similar trend taking off on this side of the Pacific.

A rare look at the

pecking order within Sega HQ was afforded when AM3 was not allowed to show off *Last Bronx* because it would have clashed with the proliferation of fighting games

created by internal rival AM2. This, however, was just one of several new AM3 releases at AOU, and the development team responsible for *Sega Rally* shows no sign of letting up its fantastic pace.

Most notably, there was *Gun Blade NY*, a Model 2 shooting game very much in the highly successful *Virtua Cop* mold. Here, however, instead of running around a cityscape shooting people, the player flies over the cityscape, in a helicopter, shooting people. The city is based on New York and includes Times Square, the Rockefeller Plaza and the UN building among its location settings. Apparently, to get a decent level of authenticity in the game, half of the *Gun Blade* design team flew over to the big apple to get a look for themselves. Sounds like hard work.

Special features of the

game include basic AI in the enemies (enabling them to dodge bullets) and a stage where it will be possible to take on aircraft carriers (presumably against a Statue of Liberty backdrop).

Jumping on the retro bandwagon, AM3 also presented *Decathlete*, a Titan system board game based on the classic button-crunching *Decathlon* title. Although the athletes are now all polygon-based, the gameplay is the same old "press-buttons-to-gain-speed" story. Could the "frantic button presser" be on the verge of enjoying a comeback? Tragically, anything is possible in this business. Especially in an Olympic year.

Sega also chose the AOU to officially announce licensed third-party development using its Model 2 board. First up was Tecmo

15

breaking

Namco's PlayStation-powered System 11 games were impressive. From left, Xevious3, Dunk Mania, and Soul Edge

A curio to match VF Kids is Prop Cycle, a title continuing Namco's obsession with physically interactive gaming

presenting *Dead or Alive*, a highly competent beat 'em up. The game has many similarities with Namco's *Soul Edge* — the characters are dressed in comparable garb and they use similar weapons. But the characters and backgrounds were recognizably Model 2 based. Furthermore, Jaleco was showing off *Super GT 24h*, a racing game apparently aimed (at the request of Sega) to compete with *Rave Racer*.

Among a

proliferation of sequels and games which had already been revealed at earlier shows (e.g. *Dirt Dash*, *Time Crisis*, and *Soul Edge*), Namco really only had two key titles to present at AOU: *Tokyo War* and *Prop Cycle*. *Tokyo War* is a *Cyber Sled*-style tank battle game set in two real Tokyo

tunnels. To propel the vehicle, the player must sit on a mock-up bicycle and actually pedal — the faster he or she pedals, the faster the prop cycle travels. The title is aimed more at female players because of its "softer" gameplay. Lucky them. Among the also-rans were racing games, *Victory Lap* and *Alpine Surfer* (a title US snowboarders will surely love).

Victory Lap — using the Super System 22 board — features a similar look and feel to *Ace Driver*, but includes a new championship mode (where points can be stored up from race to race) and two new courses. In *Alpine Surfer*, the player stands on a snow board instead of two skis. There are also two modes available — Free Run and Gate Trial — and an interesting jump feature providing the game's most notable attribute.

Although they

are basically budget products, System 11 coin-ops are becoming an important part of Namco's release strategy. This is the first time that using home console

Konami's presence was low-key, although Wave Shark was good fun

Capcom's Star Gladiators (left) is its first home-grown effort to run on its PlayStation-based coin-op. Street Fighter Zero 2 (right) was better

districts (Tokyo Area and Tokyo Bay). The game, one of only a few System 22 titles to be presented, enables four players to take part at once. Protagonists can join either the white or green army which means, if there are two players on one side, they can compete or cooperate in order to win.

A curio to match *VF Kids* is *Prop Cycle*, a title continuing Namco's obsession with physically interactive arcade games. Here, the player controls a flying bicycle which can soar over mountains, canyons, and rivers, and can also glide through
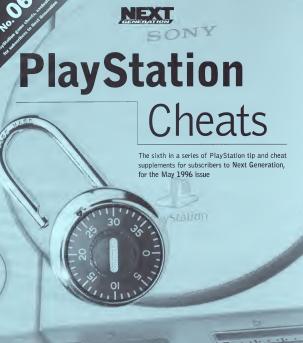

Taito's interesting Psychic Force (above left) took the 3D fighter and suspended it in midair. Ray Storm (right) took a more familiar path

NEXT GENERATION

SONY

PlayStation

Cheats

The sixth in a series of PlayStation tip and cheat supplements for subscribers to Next Generation, for the May 1996 issue

Thank you for subscribing to Next Generation. This free tips supplement is our way of saying a small thank you to all our readers for helping make Next Generation the hottest gaming magazine in the US. If you have any tips or cheats of your own, please share them with us. E-mail them to us at ngonline@imagine-inc.com. Fax us at 415.468.4686. Mail us at Next Generation Tips, 150 North Hill Drive, Brisbane, California 94005

cheating

UNLIMITED COMBOS

WWF Wrestlemania
Acclaim

To make the Combo Meter show up for every move first go to the Character Select Screen. Hold L1 and R2, then press Square, X, Circle, Triangle. When the Combo Meter shows up beneath your character, you'll know you've done the code correctly.

FIGHT AS BOSSES

Toshinden 2 (Japan)
Takara

To play as any of the four hidden boss characters in Toshinden without first having to defeat them, first go to the Title Screen. As the Title Screen text is coming in from the left-hand side of the screen quickly press L1, L2, Triangle, R1, R2, Square on controller one. You will know you've done the code right if you hear a chime. Then wait for the Title Screen text again to come onto from the left-hand side of the screen and on controller two, press Square, R2, R1, Triangle, L2, L1. To then access the hidden characters, highlight the random box and hold down the Select button until you see the character you'd like to choose.

OVERDRIVE MOVES

Toshinden 2 (Japan)
Takara

To do any of the characters' overdrive moves, simply wait until the overdrive meter at the button of the screen fills up, then press all four shoulder buttons (L1, L2, R1, R2) at the same time. Each character's more is different, but they are all more powerful than their normal moves.

INVINCIBILITY MODE

Viewpoint
Electronic Arts

To play Viewpoint in Invincibility Mode, first press Start at a pont to pause the game. While the game is paused, press Square, Square, Circle, Circle, Triangle, X, Square, Up, Up, Down, Down, Left, R1, Select. If done correctly, you will be able to play the rest of the game without taking any damage.

SUBTLE MOVES

In The Zone
Konami

To jump higher in NBA: In The Zone, press Turbo and Jump at the same time. To give an alley-oop pass, press the Pass and Shoot buttons at the same time. To do an unblockable dunk press Square to jump, then double tap Triangle while the player is in the air.

STAGES SELECT

Loaded
Interplay

To access the stage select, go to the title screen and press Up, Up, Down, Left, Circle, Triangle, X. This will give you instant access to any level in the game.

HIDDEN CHARACTER

Loaded
Interplay

To go to a hidden character named Pogo, to the character select screen. While at the character select screen, push and hold all four shoulder buttons (L1, L2, R1, R2). While all four buttons are being held, press Select and Start at the same time. If done correctly, you should hear a voice say "Pogo" and you will see the new character appear as a selection.

LEVEL CODES

Thunderstrike 2
U.S. Gold

Advancing through Thunderstrike 2 is not one of the easiest things to do, but it is one of the most fun and with the following level codes it should be quite a bit easier. Enter the codes; just go to the passwords screen and advance to any level you'd like to play.

South America
Level 1 - 0NHV0V6VEBDU55Q

Level 2 - 2NH7OV9VEFDQ592
Level 3 - 7RH3OV7AEFD64BI
Level 4 - BNH3OV8EEJD24PI

Gulf 2 - Oil Dispute
Level 1 - VNHROV06IEJD53I
Level 2 - 0RHVOU06ENDA53A
Level 3 - IFHD0U0U6RDM59P2
Level 4 - NJHP0UKE6VDI5BI

Stealth
Level 1 - 07HP0U0QAUDE45A
Level 2 - U7IL0UNIAUDA5RA
Level 3 - AFHP0U0UA2DM4HI

Central America
Level 1 - FJHL0UGII2CE4KI
Level 2 - G7HH0U72I2CA5R2
Level 3 - 2BHP0URQI6CM5BA

South China Sea
Level 1 - KRG5OURQ2R6GE4J2
Level 2 - 0RGLOUTI3AGA5UI
Level 3 - FRG9S1CM3EGM52I

Panama
Level 1 - 93G5SD9UNGGE40A
Level 2 - VVG5SHUENGGA4SQ
Level 3 - JNGH4CPUNKGM5TI

Eastern Europe
Level 1 - L3GG4406V0EE5R1
Level 2 - FTGK55Q0V0EA41A
Level 3 - 27GK50UMV4EM5BQ

Gulf 1 - Canyon
Level 1 - 7FGK4BT6RBME4NI
Level 2 - 8JGK4BVURBMA5JQ

End - T7GK2BU2SCMM40I

BONUS ITEMS

Assault Rigs
Psygnosis

A game like Assault Rigs is made infinitely better as you continue to play and build your arsenal. Here are some easy ways to speed-up the process. To access all weapons, press Left, Right, Left, Left, Right, Left, Right, Right, Up, Down, Up, Up, Down, Up, Down, Down during gameplay. When you will hear the message: "All weapons added... Oh yes!" you'll know you've done the code right. To be invincible, press Left, X, Left, X, Left, Left, X, Right, X, Right, X, X. When you hear: "Invincible! Yes indeed," you'll know you've executed the code right.

LEVEL CODES

Assault Rigs
Psygnosis

To skip to any level of the game simply enter the following level codes at the passwords screen.

Level 1 - Welcome - Circle, Circle, Circle, Circle, Circle, Circle
Level 2 - Next Gen - Square, X, Square, X, Triangle, Square
Level 3 - This way - Triangle, Square, Square, Circle, Circle, Triangle
Level 4 - Joyjoy - Triangle, Square, Triangle, Square, Triangle, Triangle
Level 5 - Noddy - Square, Triangle, Triangle, Triangle, X, Triangle
Level 6 - Wastelands - Triangle, Square, Circle, Circle, X, Square
Level 7 - Vertigo - X, Square, Square, Square, Circle, Triangle
Level 8 - Gem Tower - Triangle, Square, X, Square, Triangle, Triangle
Level 9 - Ramps - Triangle, Square, X, Square, X, Square, Triangle
Level 10 - Obliterate - Triangle, Triangle, Circle, Square, X, Square
Level 11 - Arena - Triangle, Triangle, X, Triangle, Circle, Square
Level 12 - PBM - Circle, Square, Triangle, Square, Triangle, Triangle, Circle
Level 13 - Ramps - Triangle, Square, Circle, X, Triangle, Square
Level 14 - Oasis - Triangle, Triangle, X, Square, Square, X
Level 15 - Halls - Circle, X, Triangle, Triangle, Triangle, Triangle
Level 16 - Coaster - Circle, Square, Circle, Circle, Circle, Square

Level 17 - Mine - Triangle, Triangle, Circle, Triangle, Square
Level 18 - Look Up - Square, Circle, Square, X, Square, Triangle
Level 19 - Deadline - X, X, Square, X, Triangle, Square
Level 20 - Fort - X, Square, X, Triangle, Triangle, Square
Level 21 - Stairway - Triangle, Square, Triangle, Square, Triangle, Triangle
Level 22 - Park A Lot - Square, Square, Triangle, Circle, Square, Triangle
Level 23 - ZamCam - Circle, X, X, X, X, Triangle
Level 24 - Showdown - Triangle, Square, Square, Triangle, Triangle, Triangle
Level 25 - Wild - Triangle, Circle, Triangle, Triangle, Circle, Square
Level 26 - Dil Rig - Square, Circle, Circle, X, Square, X
Level 27 - Rightway - X, Circle, Square, Triangle, Triangle, Square
Level 28 - Waste Two - Square, Circle, Square, Square, Square, Square
Level 29 - Dodge - Triangle, Square, Circle, X, Circle, Square
Level 3D - Air - Square, Circle, X, Circle, X, Square
Level 31 - Jump - Circle, Square, X, Circle, Triangle
Level 32 - Room 1D1 - Triangle, Square, X, Circle, Square, Square
Level 33 - Firepower - X, X, Triangle, X, X, Square
Level 34 - Wave - X, Circle, Square, Circle, Circle, Square
Level 35 - Push Off - Circle, Triangle, X, Triangle, X, Triangle
Level 36 - Perimeter - X, Triangle, Square, X, X, Square
Level 37 - Spiral - X, Triangle, Triangle, X, Triangle, Square
Level 38 - Bounce - Circle, X, Triangle, Triangle, Square, Triangle
Level 39 - The Castle - Square, Circle, Triangle, Square, Triangle, Square, X
Level 40 - Fortress - Square, X, Triangle, X, X, Triangle
Level 41 - Lifts Ahoy - Triangle, X, Triangle, Circle, Square, X
Level 42 - Push Me - Circle, X, Triangle, Circle, Triangle, Square

HIDDEN CHARACTERS

Street Fighter Alpha
Capcom

To play as M. Bison, go to the random box on the character select screen. Hold down L2 and press Left, Left, Down, Down, Left, Down, Down, Square and Triangle. To play as Akuma, go to the random box and hold down L2 and press Left, Left, Left, Down, Down, Down, Square and Triangle. To play as Dan, go to the random box, hold down L2, and press Triangle, Square, X, Circle, Triangle. To access different color outfits replace Square and Triangle with Circle and X for M. Bison and Akuma. For Dan, press Triangle, Circle, X, Square, Triangle while holding the L2 button.

HIDDEN OPTIONS

Gex
Crystal Dynamics

To use any of the following codes, you must first pause the game with the Start button then while the game is paused press and hold R1. While holding R1 with the game paused, enter the following codes. If done right the game will "unpause" by itself when you are finished.
Infinite Lives - Up, Circle, Triangle, Down, Right, Square, Down
Ice Weapon - Circle, Circle, Left, Down, Circle, Up, Right
Super Jump - X, Circle, Up, Up, Down, Right, Right
Fire Balls - X, Up, Right, Up, Right, Right
Electricity - Right, Left, Right, Circle, Triangle, Right, Circle, Down, Right
Invincibility - X, Square, Down, Down, Up, Down, Right

DISARM ENEMIES

Namco Museum Classics Vol. 1
Namco

This code is as classic as the game itself. At the beginning of a game of Galaga, avoid shooting at the ships as they go into their first formation. Then destroy all of the ships except for the yellow/blue ships in the first row from the left. Let the two remaining ships fly and shoot at you for several minutes. Be sure not to fire even one shot until the ships stop shooting at you. Once you see positive the ships are no longer shooting at you, destroy the two remaining ships. Once you have destroyed these ships and the game progresses, you will see that no more ships will fire throughout the rest of the game.

LEVEL PASSWORDS

Johnny Bazookatone
U.S. Gold

To jump to the second level, enter AFLEAPIT at the password screen. For level three, enter TEASPDON. For level four, enter SEDATION. To jump to

the fifth and final level enter VERYNICE.

INVINCIBILITY CODE

Johnny Bazookatone
US Gold

To play Johnny Bazookatone in invincibility mode, enter the password PILCHARD at the password screen. For a level select try entering KRISTIAN at the password screen.

STAGE SELECT

Jumping Flash!
Sony CE

To access the stage select in Jumping Flash!, go to the title screen and press Up, Up, Down, Down, X, X, Left, Right, Left, Right, X, Triangle, X, Triangle. When the background turns red you'll know you've done the code correctly. Start the game and use your d-pad to scroll through the stages.

NightWarriors: Darkstalkers Revenge
Capcom

SPECIAL METER

As you perform hits and moves, or block a hit, this special bar fills itself up. Once it has been filled, it begins to fill again. The color changes for each time it fills up. Most special moves or throws can be powered up to ES versions. This uses one full level. The EX moves require one level as well. The more times the meter fills up, the more ES and EX moves you can pull off consecutively.

GUARD REVERSALS

Guard Reversal is the ability of each character to cancel his/her own block into a particular special move, depending on who the character is. To perform a Guard Reversal, you must finish the code for your particular Guard Reversal at precisely the same moment you block the move you are attempting to reverse.

THROW SOFTENING

By hitting strong or fierce in the first frames of a throw animation you can enable your character to land on his/her feet and be in position to strike. You can also flip out of a hold after the first hit, if you time the button correctly.

ROLLIN', ROLLIN', ROLLIN'

After being knocked to the floor, you can press toward or backward to move while getting up. It's good to get out of trouble or set up a quick counter. You're also invulnerable to normal attacks while getting up. A great way to set up a throw is to roll into your opponent and perform the throw.

Demitri Maximov
Chaos Flare. . . . . ⚫⚫⚫ + Punch
Bat Spin . . . . ⚫⚫⚫ + Kick
Demon Cradle. . . . . ⚫⚫⚫ + Punch
Dashing Demon Cradle. . . ⚫⚫⚫⚫⚫⚫ + Punch
Negative Thorn . . . . 36D + Punch (when close)
EX Attack: Midnight Pleasure. . ⚫⚫ + 2 Punches
EX Attack: Demon Blast. . . . . ⚫⚫ + 2 Kicks

Huitz i i
Plasma Beam. . . . . ⚫⚫⚫ + Punch
Might Launcher. . . . . ⚫⚫⚫ + Kick
Genocide Vulcan. . . . . . . ⚫⚫⚫ + Punch
Reflect Wall. . . . . ⚫⚫⚫ + Punch (Guard Reversal)
Circuit Scrapper. . . . . . . ⚫⚫⚫⚫⚫ + Punch (when close)
EX Attack: Confusioner. . . . ⚫⚫ + 2 Kicks
EX Attack: Final Guardian. . . ⚫⚫⚫⚫ + 2 Kicks

CHAINS

The combo system enables you to chain a series of normal attacks together, much like Street Fighter Alpha. You have to cancel the animation of a normal move into another normal move, so that the hits come in rapid succession. To successfully pull off a chain combo, you

cheating

must hit the next attack at the precise moment your first attack makes contact. The best order for chains is as follows: Jab-Short-Strong-Forward-Fierce-Roundhouse. Therefore, you could conceivably pull off a six-hit combo with all six buttons in sequence (that is, if all your attacks can reach the opponent). However, you can skip any of the attacks in the sequence for shorter chains. For example, you can do a Jab, Strong, Forward, Roundhouse or a Short Fierce. However, you can't reverse the moves — you must start with weak and work your way up.

Lord Raptor
Skullfang.	30 + Kick
Hell's Gate.	⬤⬤⬤⬤ + Kick
Death Hurricane.	⬤⬤⬤ + Kick (Guard Reversal)
Skull Vanish.	⬤⬤⬤ + Punch (when close)
EX Attack: Evil Scream. .	⬤⬤ + 2 Punches
EX Attack: Death Voltage.	⬤⬤⬤⬤ + 2 Kicks
EX Attack: Hell's Dunk. .	⬤⬤⬤⬤ + 2 Punches

Bishamon
Ia Gin.	⬤ hold, ⬤ + Punch or Kick
Hane Yaba.	⬤⬤⬤ + Punch
Keesis Yaba.	⬤⬤⬤ + Punch (after contact w/Hane Yaiba)
Tsuji Hayate.	⬤⬤⬤ + Punch (after contact w/Hane Yaiba)
Mukuro Fuujii.	⬤⬤⬤ + Punch
Ki En Zan.	⬤⬤⬤ + Punch
Kirisute Gomen.	360 + Punch (when close)
EX Attack: Drakubi Hmon.	⬤⬤⬤⬤⬤ + 2 Punches
EX Attack: Tsurane Gin. .	173⬤2 + 2 Kicks

Pyron
Soul Smasher.	⬤⬤⬤ + Punch
Mid-Air Soul Smasher. . .	⬤⬤⬤ + Punch (in air)
Zodiac Fire.	⬤⬤⬤ + Punch
Orbiter Blaze.	⬤⬤ + Kick (in air)
Galaxy Trip.	⬤⬤⬤ + Kick
Planet Burning.	⬤⬤⬤⬤ + Punch
EX Attack:	
Cosmo Disruption.	⬤⬤⬤⬤⬤ + 2 Punches

Morrigan Aansland
Soul Fist.	⬤⬤⬤ + Punch
Midair Soul Fist.	⬤⬤⬤ + Punch (in air)
Shadow Blade.	⬤⬤⬤ + Punch (Guard Reversal)
Shell Kick.	⬤⬤⬤ + Kick (in air)
Vector Drain.	⬤⬤⬤⬤⬤ + Punch (when close)
EX Attack:	
Darkness' Illusion.	Jab, Jab, ⬤, Short, Fierce
EX Attack:	
Astral Vision.	Jab, Jab, ⬤, Strong, Fierce

Rikuo
Crystal Laser.	⬤⬤ + Punch
Trickfish.	⬤⬤ + Kick
Poison Breath.	⬤⬤⬤ + Kick
Sonic Wave.	⬤⬤⬤ + Punch (Guard Cancel)
Crystal Lancer.	⬤⬤⬤⬤ + Punch (when close)
Sky Neptune.	⬤⬤⬤ + Kick (when close)
EX Attack: Aqua Spread.	⬤⬤⬤ + 2 Kicks
EX Attack: Water Jail. . . .	⬤⬤⬤⬤ + 2 Punches
EX Attack: Sea Rage. . . .	⬤⬤⬤⬤⬤ + 2 Punches

Jon Talbai
Climb Laser.	⬤⬤ + Kick
Forward Beast Cannon. .	⬤⬤⬤ + Punch

Uf Beast Cannon.	⬤⬤⬤ + Punch (guard reversal)
Df Beast Cannon.	⬤⬤⬤ + Punch (in air)
Millon Flicker.	⬤⬤⬤ + Punch
Wild Circular.	⬤⬤⬤⬤⬤ + Kick
EX Attack: Beast Cannon.	⬤⬤⬤ + 2 Punches
EX Attack: Mirage Body. .	⬤⬤⬤⬤ + 2 Kicks

Sasquatch
Big Snow.	⬤⬤⬤ + Punch
Big Towers.	⬤⬤⬤ + Punch
Big Cyclone.	⬤⬤⬤ + Kick
Big Typhoon.	⬤⬤⬤ + Kick (Guard Cancel)
Big Brunth.	⬤⬤⬤⬤⬤ + Punch (when close)
Big Swing.	360 + Kick (when close)
EX Attack: Big Freezer. .	⬤⬤⬤⬤ + 2 Punches
EX Attack: Big Ice Burn.	⬤⬤⬤⬤ + 2 Kicks

Victor Von Eidenhelm
Giga Hammer.	⬤ Hold, ⬤ + Punch
Giga Buster.	⬤ Hold, ⬤ + Kick
Gyro Crush.	⬤⬤⬤ + Punch
Mega Spike.	380 + Punch (when close)
EX Attack: Thunder Break.	⬤⬤ + Kick
EX Attack: Great Geldenhelm.	⬤⬤⬤⬤⬤ + 2 Kicks, Punch

Donovan Bal na
Drop Sword.	Punch + Kick
Call Sword.	Punch + Kick
Sword Elementals:	
Etreet Sword.	⬤⬤⬤ + Punch (Guard Reversal)
Blizzard Sword.	⬤⬤⬤ + Punch
Lightning Sword.	⬤⬤⬤ + Punch
Sword Grapple.	⬤⬤⬤⬤⬤ + Punch (when close)
EX Attack: Breath of Death.	⬤⬤⬤ + Kick
EX Attack: Change Immortal.	. Strong, Jab, ⬤, Short, Forward

Anakaris
Sarcophagus Dance. . . .	Punch + Kick
Pharaon's Judgement. . .	⬤⬤⬤ + Punch (in air)
Cobra Blow.	⬤⬤⬤ + Punch
Mummy Drop.	⬤⬤⬤ + Kick (arches overhead)
The Void (catches projectiles).	⬤⬤⬤ + Kick
EX Attack: Pharaoh's Magic.	. Forward, Jab, ⬤, Forward, Roundhouse
EX Attack: Chasm of Hell. .	. ⬤⬤⬤⬤ + Punch
EX Attack: Pharaoh's Split. .	Jab, Jab, ⬤, Forward, Roundhouse

Helen-Ko
Anki Hou.	⬤⬤⬤ + Punch
Senpuu Bu.	⬤⬤⬤ + Kick
Henkyou Ki.	⬤⬤⬤ + Punch (Guard Reversal)
Houten Geki.	⬤⬤⬤ + Punch (when close)
EX Attack: Jirei Tou. . . .	⬤⬤⬤⬤⬤ + 2 Kicks
EX Attack: Tenma Ha. .	Short, Roundhouse, Strong, Strong, Up

Falicia
Rolling Buckler.	⬤⬤ + 2 Punches
Rolling Scratch.	⬤⬤ + 2 Punches
Delta Kick.	⬤⬤⬤ + Kick
Sand Scratch.	⬤⬤⬤ + Kick (Guard Reversal)
Hellcat.	⬤⬤⬤ + Kick (when close)
EX Attack: Dancing Flash.	⬤⬤⬤ + 2 Punches
EX Attack: Please Help Me.	⬤⬤⬤⬤⬤ + 2 Kicks

technology (System 11 is based on PlayStation architecture) in an arcade board has been successful, perhaps because Namco is taking the idea seriously — producing quality games like *Soul Edge* and *Tekken 2*, instead of farming out projects to lesser development teams. Basketball sim *Dunk Mania*, for example, looked to be a graphically excellent title with flat-shaded players moving gracefully across the court. A PlayStation conversion is inevitable, possibly even eclipsing *Total NBA* when it appears later this year.

Despite the continued ascendancy of Namco and Sega, many other companies (like Capcom, Konami, Taito, Tecmo) had noteworthy titles to present

The retro bandwagon rolls on with *Xevious3*, a 3D scrolling shooter based on the 12-year-old original. This time, though, the space ships are all textured polygons with some having the ability to morph. Again, it's System 11 and therefore PlayStation fodder.

And, despite the continued ascendancy of Namco and Sega, many other companies had noteworthy titles to present. Taito, for example, pulled out of its two-year nose dive and revealed a new board, the FX-1, and two new games, *Psychic Force* and *Ray Storm*. The former is a 3D fighting game in a pubic arena suspended in space. The game is rife with special moves, combos, and special defenses, and the 3D arena is very reminiscent of AM3's *Dragon Ball*.

Comparable to *Xevious3*, *Ray Storm* is another retro-esque vertical scroller. As with the Namco title, *Ray Storm* features polygon-based ships, instead of sprites, and a similar

Although Jaffry was a sight to see, Dural's amazing morphing scenes captivated crowds (top). Aoi was interesting to see fighting in a kimono

perspective. Taito's new FX-1 board seems to be more powerful than Namco's System 11 — the sprites move faster, effects are more impressive, and the space crafts are much more detailed.

Capcom introduced two fairly important new games — *Street Fighter Zero 2* (*Alpha 2* in the US) and *Star Gladiators*. *SFZII* (literally, *SFZ 1.5* because there already is a *Street Fighter 2*) contains just enough changes to substantiate a new game. In response to questions concerning *Street Fighter 3*, Capcom representatives declined to comment. Post-show speculation, however, concluded that it was lucky for

US vs Videogames, Part 2

Meanwhile, speaking at a public library in a pre-campaign roundtable with readers of *Good Housekeeping* magazine in March, First Lady Hillary Clinton blasted videogames, saying that she was personally "appalled" by the audio in a game that appears to be *Mortal Kombat*, though it wasn't mentioned by name. Mrs. Clinton also stated that while "we don't have evidence yet about [the harmful effects of] videos [sic], we're beginning to."

Mrs. Clinton went on to say that one of the best ways to control videogame violence was with "some sort of voluntary rating system." Of course, what Mrs Clinton obviously hasn't bothered to find out is that a "voluntary rating system" was adopted by the videogame industry in December '94.

As for videogames causing harmful effects, exhaustive studies have yet to discover a link between videogames and increased violence or other harmful effects in children. (See NG 10.)

Jaffry (left) was stunning. On a small island with waves lapping on the shore (possibly the level he will fight on), he flexed his pectorals, biceps, and back muscles, while watching camera which panned around him. The grim Lau (above) almost looks real

17

breaking

One of the first scenes was Durel morphing up from the ground à le T1000 from the movie *Terminator 2*

Thank God Jecky's heir is still es ever vertical as ever (top). Although unconfirmed, the backgrounds in ell chorecters' levels mey very very well work into gameplay

Capcom that it had chosen not to reveal *SF3* at AOU — even a 3D Ken and Ryu would have had a hard time competing with *VF3*. *Star Gladiators*, however, the company's first in-house 3D polygon based beat 'em up, drew a large crowd and is perhaps Capcom's concession to the dominance of next generation 3D fighting games. The title has a similar visual style to *Toshinden*, but characters have a futuristic look. Expect *SF3* to build on this template.

So from the evidence on display at AOU, it seems Sega's domination of the arcades is currently unquestionable. *VF3*, *Sonic The Fighters*, *VF Kids*, *Virtual On*, and *Gun Blade NY* make up a formidable release schedule with which Namco will have a hard time keeping pace.

Furthermore, by licensing its Model 2 technology to third parties, Sega can delegate competition with its main rival, Namco, to other developers (hence *Dead or Alive* vs. *Soul Edge* and *Super GT 24h* vs. *Victory Lap*), leaving the AM departments plenty of time to concentrate on original high-end developments.

The arcade scene has never been as vibrant or as exciting. And even if Sega's Saturn is having a hard time battling PlayStation, its dominance in the coin-op world is without question. Expect *Virtua Fighter 3* to release this fall.

As if to highlight AoI's feetures, Jecky got his teil whipped in eech scene

Although Jacky is one of the originel, end ell-round strong, characters, Yu Suzuki and AM2 took no pity on him in the demo, es shown here getting his feir shere of hurt vie Jeffry (ouch). Notice the seagulls in the background

breaking

Virtua Fighter 3 steals US show

New technology and a slough of strong titles put ACME on the map for its 10th anniversary show

One of ACME's biggest draws was Tokyo Wars, a battle to the death tank game with great feedback

Namco's Time Crisis (top) ups the ante on Sega's Virtua Cop 2. Midway's War Gods is the perfect evolution of the popular Mortal Kombat series

While the 10th ACME (American Coin Machine Expo) glowed with a huge new cast of groundbreaking videogames, the brightest star was Sega AM2's *Virtua Fighter 3* which stole the show hands down.

The upbeat show stood in contrast with September's AMOA (American Machine Operators Association), which showed fewer games, and was full of questions about the future direction of the arcade industry. ACME, the US equivalent of the Japanese AUO (Arcade Operators' Union), boasted the first showing of at least 15 new games from Sega and Namco alone, as well as many more titles from Williams/Bally-Midway, Konami, Capcom, arcade newcomer Acclaim, and a few surprise smaller companies.

While most

companies are still building their first 3D fighters, like Midway (or Tecmo, which licensed Sega's Model 2 technology for *Dead or Alive*), Sega signaled that its direction, in light of its new partnership with MCA-Universal and Dreamworks SKG, creating Sega Gameworks, will be FECs (Family Entertainment Centers), and high-end simulators. High level Sony representatives were also at the show, watching Sega's every step, and planning their own entry into the arcade industry, which pundits speculate will be sometime in 1997.

But on the floor, it was *VF3* that stunned the crowd, sending out a clear message that Sega, with its 5 million-polygons-per-second Model 3 hardware, is still the industry's clear leader. The Japanese arcade giant planned a perfect coupe over competitor Namco, whose *Tokyo Wars*, *Time Crisis*, and *Soul Edge* were ready to take the show crowd.

However, Namco's new light-gun game, *Time Crisis* (**NG 16**), found its share of attention. Featuring a foot pedals that enables reloading and ducking maneuvers, the time-based adventure added a whole new level to the steady shoot 'em up genre. *Tokyo Wars*, a four-player tank battle sim, also drew its large share of gamers.

While throngs

of people found the Sega and Namco booths enthralling — their games ranging from Sega's *Manx TT*, *Virtual On*, *Virtua Fighter Kids*, and *The Sonic Fighters*, to Namco's *Dirt Dash*, *Victory Lap*, and *Soul Edge* — Midway had a surprise title of its own. *War Gods*, one of the only uniquely American fighting games on the floor, drew steadily increasing crowds, as gamers discovered how to move the fantastically digitized 3D characters and learned secret moves. Midway has produced, for the first time in arcades, characters with digitized texture-maps of real people wrapped around polygonal structures, creating clean-cut, fast moving characters. Simply put, *War Gods* is a technological feat, and the next step forward for Midway's *Mortal Kombat* series (though it's not technically *Mortal Kombat*).

Next door at the Capcom booth, yet another new animated, 2D fighter appeared in the guise of *Street Fighter Alpha 2*. Highlighting a creative feature in which gamers can program up to three simultaneous moves, and sporting three new characters, one of whom can switch fighting styles in the midst of play, *SFII* drew only small crowds of loyalists, but surely will pack arcades with fighting fans.

Making a bit of a comeback is Konami. With *Midnight Run*, a four player driving game, *Wave Shark*, a speedy jet-ski game full of potential, and *Run and Gun II*, a sequel to the classic, Konami is gaining strength.

Among the more unusual games was Virtuality's *Missile Command*, an entertaining VR remake of the original, and a smart, if not trendy, direction for Virtuality to take. **ng**

And the Winner is...

The American Amusement Machine Association (AAMA) handed out its most prestigious accolades, the Manufacturer and Distributor of the Year Awards, to Williams Bally/Midway and Brady Distributing Company, respectively. AAMA judged Williams on design, product quality, and customer satisfaction, while gauging Brady on sales, product enthusiasm, marketing support, and parts-and-service excellence.

The AAMA board of directors also presented its Product Excellence Awards for 1995, although these rewards are strictly based on sales achievements, (i.e., how well they sold). In the top videogame category, the three Diamond Award winners were Sega's *Daytona Twin*; SNK for its NEO-GEO System; and Midway, for its *Mortal Kombat 3* kit.

Street Fighter 3? Never heard of it... Instead Capcom had Street Fighter Alpha 2 (top). Manx TT blew crowds away (above)

breaking

Just who is winning the 32-bit war?

Acquiring accurate sales figures in the videogame industry is nearly impossible. But NG managed it...

Sega drops Saturn price to $199 in Japan; US to follow

Sega of Japan has announced a new scaled-back Saturn which will retail for $199 US, around $150 less than the current price in Japan. Savings were realized through economies of scale and chip integration; the unit will be fully compatible with current Saturns. Although no official announcement has been made yet by Sega of America, it is beyond dispute that the savings will passed on to US consumers soon, according to sources within Sega. The only question is when.

Although some Sega insiders were hinting at a price drop timed for the September launch of Nintendo 64, increasing numbers of industry watchers are convinced Sega will attempt an E³ surprise for the second year running. Especially considering that "[Sega] tends to announce price cuts at the same time we announce a batch of new titles," according to a source at Sega who asked not to be identified.

B ack in the fall of 1995, Sony was eager to publicize PlayStation's awesome early sales figures (100,000 sell-though in the first weekend it was available). Meanwhile Sega, whose supertive Saturn launch in May was less than successful, kept quiet about numbers until after the winter holiday season. This led to a perception, of course, that PlayStation was pounding the hell out of Saturn, in terms of sales.

According to Sony, it sold-in 800,000 PlayStations through the end of 1995. Sega sold-in just half that number of Saturns. And according to the generally respected TRST report from the NPD Group, Saturn went from having a 58% share of the 32-bit hardware market in August, 1995, to having just a 12% stake in September (versus 83% for PlayStation). By December, Saturn's share had increased slightly, while PlayStation's share had decreased. But still, the year-end totals gave 27% of the 32-bit market share to Saturn, and 62% to PlayStation, according to the TRST figures. (Incidentally, the 3DO Company sold-through a total of 1%, while Atari had sold, statistically, 0% of total units during this same period.)

In the 32-bit realm,

therefore, Sony appears to have enjoyed a commanding victory over Sega, especially since PlayStation was only available the last third of 1995. But this (approximate) two-to-one ratio is considerably less than the "total market domination" hyped up by the likes of Sony's forebeees Marty Homlish, who declared in an interview in **NG 15** that "we believe we are outselling our competitors by a five-to-one ratio."

And, throughout the start of 1996, the availability of exclusive titles for Saturn, like *Virtua Fighter 2*, and the systems' once parity has led to what is approximately a one-to-one selling ratio between Saturn and PlayStation (according to an informal survey of videogame retailers conducted by **Next Generation**).

Indeed, the surprising surge in Saturn sales during the last months of 1995 and the start of 1996 has actually caused many analysts to re-evaluate Saturn's current status and its performance in 1995.

While Nintendo's Howard Lincoln (an admittedly biased source), interviewed on page 6, estimates that only 150,000 to 200,000 Saturns had been sold at the end of 1995 vs. 500,000 PlayStations (a figure which agrees with the TRST data), Ted Lannon of Fairfield Research, quoted in the March issue of *Computer Entertainment News*, claims the figures for Sony and Sega in North America are much closer. Lannon estimates the number of PlayStations sold to be 569,000, but he puts the current Saturn figure at 474,000 — far closer than previous estimates, or the TRST data, suggest.

So what does it all mean? First off, it's obvious that not all the data agrees. Fairfield's research shows the same trends as the NPD Group's, but without definitive confirmation from the principal companies, there will always be differences in estimates.

More importantly, it indicates that Sega could be doing far better in the 32-bit race than previously thought, and that a strong software surge through latter half '96, combined with any slip-ups on Sony's part, could flip their relative positions quite rapidly. Throw in the expected Saturn price drop and the (promised) launch of Nintendo 64, and it is clear to see that the race for next-generation dominance is far from over.

Saturn's sell-through numbers increased favorably at year's end '95 and into '96

So why lie?

While both Sega and Sony provided sales figures through the winter holiday, both figures were "sell-in" numbers (the number of systems sent to stores). What has not been released is the far more important "sell-through" figure (the number of systems actually purchased by consumers). And discovering the actual numbers is extremely difficult.

Why? The only people who really know the sell through number is the hardware companies themselves — and they ain't talking. First and foremost, no company wants to give its competition valuable information with which it could restructure its marketing campaign. Second, no company wants to admit it's missed its target sales figures (which are set bullishly high). Third, no one wants to set a precedent of being open with its numbers, in case it has to try and hide a disaster in the future. But most importantly, videogame hardware battles are often won or lost on the basis of perceived momentum. The decision made by a developer to support a platform is based on his perception of how successful the platform is going to be 18 months down the line. In turn, the decision to support the platform will have a positive affect on its likelihood of success. It's a chicken and egg situation that we all, unfortunately, have to live with.

Open All Night.
No Quarters Needed.

Super NES® and GENESIS™ versions coming this summer.

breaking

movers & shakers

A monthly look at **business news** affecting the gaming world

by **Christopher Sherman**

Christopher V. Sherman is the publisher of *MMWIRE*, the leading daily news service on the business of interactive entertainment. *MMWIRE ONLINE* can be found at http://www.mmwire.com. Email him at multimediawire@ internamp.co

50-PLUS COMPANIES SUPPORT MOVING WORLDS VRML SPEC.

N E W S L I N E : Fifty-six companies have offered support for the Moving Worlds proposed specification for VRML 2.0 (Virtual Reality Modeling Language), including Chaco Communications, Inc., Adobe Systems, Inc., Dimension X, Macromedia, Netscape, Silicon Graphics, Inc., Sony Corp., IBM, and others.

B O T T O M L I N E : Keep an eye on this one folks. With gaming going online, VRML might be the glue to hold your next online game together. VRML pundits expect that the proposed specification will enable the development of graphically intense, platform-independent, interactive multi-user applications on the Web. Moving Worlds brings multi-user functionality and interactivity to the hitherto flat VRML world, enabling developers and authors to create layers of media including 2D and 3D graphics, images, video, text and sound. See this site for more information: http://vag.vrml.org/.

ACCLAIM MAKES COIN-OP DEBUT

N E W S L I N E : Acclaim has entered the coin-op market with the debut of Warner Bros. *Batman Forever* through its subsidiary, Acclaim Coin-Operated Entertainment, Inc. The side-scrolling fighter, developed by Iguana Entertainment, made its debut with *NBA Jam Extreme* at ACME (the American Coin Machine Expo). It provides players with the choice to be either Batman or Robin, as they venture through Gotham City in an attempt to prevent Two-Face and The Riddler from taking it over.

As both Acclaim and Sony move into the coin-op sector, Sega's and Namco's reign is under threat

B O T T O M L I N E : The move could bode well for Acclaim as it continues to expand its product base and begins taking some of the weight off its home gaming unit, even if the home product sold poorly. It is usually a good move to have your corporate fingers into more than one market — as long as that market is complementary to your core business. Synergy — there's that word again.

BANDAI PIPPIN A SLEEPER HIT?

N E W S L I N E : Bandai Co. Ltd.'s Pippin division, Bandai Digital Entertainment, expects to launch the Pippin Atmark in Japan this spring. The machine is expected to come with four titles and a modem. Bandai's plans call for 200,000 units sold in Japan in the first 12 months and 300,000 units internationally in the first year the machine is sold outside of Japan. The Pippin will debut at E^3 in LA this May.

B O T T O M L I N E : It's expected the Pippin (based on Apple technology) will be a sleeper hit with consumers. While the machine is not targeted at hard-core videogame enthusiasts, it looks like it will have potential with other consumers. Bandai appears to be positioning the machine as an Internet solution that may win over some believers.

Game machine? Cheap way of getting on the Internet? Something completely different? Only Bandai knows

ROCKET, CYBERCASH TEAM FOR ONLINE ARCADE AND CLASSIC GAMES

N E W S L I N E : Rocket Science is teaming with CyberCash Inc., a developer of secure Internet payment solutions, to codevelop technology for pay-as-you-play Net transactions. Rocket Science plans to use the technology to open a virtual WWW arcade.

B O T T O M L I N E : Rocket Science is in turn-around mode and has set its sites on the Net. The company is talking to rights holders of major classics and hopes to have 20 classic games online by the second half of 1996. It's believed that the "rights holder" could be none other than Atari...

Rocket Science teaming up with Atari? It's a videogame marriage made in heaven. And we mean that most sincerely

TEN READIES TO LAUNCH

N E W S L I N E : Total Entertainment Network (TEN) wrapped up another round of financing for more than $12 million. Vertex Management, Goldman Sachs, and Ameritech led the round.

B O T T O M L I N E : TEN plans to use the money for introduction and roll-out of the service, which will be introduced this spring. Initially, the company will rely on bundling deals to get the word out. TEN certainly has the backing, but now the question is can it perform?

breaking

Arcadia

Marcus Webb is the editor-in-chief of RePlay magazine, the US' leading trade amusement magazine

The newest games and updates from the coin-op field

by Marcus Webb

Steven Spielberg adds his name to Sega FECs

Konami's new racer is linkable up to four players

A War God-dess displays how far a powerful pair of thighs can get you

"Sega Gameworks" Goes Forward with Speilberg and MCA

It's official. As of March, Sega beland its U.S. coin-op division into a joint venture with MCA Universal and DreamWorks SKG (Steven Spielberg's new production company). The result: a brand-new firm called Sega GameWorks, in which Sega Japan is a partner and shareholder, along with MCA and DreamWorks.

Oscar-winning motion picture genius Steven Spielberg himself will have a direct hand in designing some new Sega fun sites. Indeed, he has already started spinning out creative business ideas, concepts, and strategies for the joint venture, said Al Stone, former president of Sega's U.S. coin-op side and now one of GameWorks' two chief execs. Look for GameWorks to use a Spielberg concept for new 30,000 sq. ft. fun centers. Like SoCal's Sega City, these two Spielberg-inspired sites will probably share indoor and outdoor mall space with other high-end leisure attractions such as multiscreen United Artists movie theaters, Imax special format film theaters, book superstores, themed restaurants, upscale coffee cafes, etc., all at a single venue. Sega plans to use Speilberg's name as a magic key to unlock entire new countries, new venues, and new opportunities for various types of locations in the US and worldwide.

At Stone also confirmed that at least one coin-op other than Virtua Fighter 3 will use Sega's Model 3 board (which pushes up to 1 million polygons per second) and be released in August or September, although the date has not yet been finalized.

Konami, Matsushita Plan 64-bit Home and Arcade Sister Systems

First, Sega did it with Saturn and Titan. Then, Namco & Sony followed with PlayStation and System 11. Now, Konami and Matsushita (Panasonic) are planning to develop sister systems using common hardware platform

elements for the coin-op and home video markets. Under a joint venture arrangement, Konami will employ Matsushita's 64-bit M2 system in the coin-op market. This technology enables game designers to create 3D computer graphics with ease. The motherboard will be released in Japan by the end of 1996; U.S. release date is unclear at press time. "We expect this new business to generate $200 million or more in gross sales," said Richard Rush, Konami's coin-op marketing manager. M2 was purchased from America's innovative 3DO firm last October by Matsushita. Konami M2 coin-ops will be adapted to the Panasonic home videogame system where possible, according to sources in Japan. In addition, Capcom will reportedly develop M2-based home videogames as well, followed by coin-op videos using the M2 platform.

ACME Report from the Front

Having attended ACME, the American Coin-operated Machine Expo, we have a good summation of the following and eagerly awaited arcade videogames.

Midway in the Third Dimension

Williams/Bally-Midway came out with its long-rumored War Gods. (This follows months of coy denials and changes of subject by the factory when confronted with official requests for information about this title.) War Gods has a fighting style similar but not the same as Mortal Kombat, within a more impressive graphics environment and 3D texture-mapped polygons. Essentially, War Gods is a 3D version of Mortal Kombat — on speed.

The characters are polygonal, wrapped with digitized texture-maps creating a spectacular and result, with real 3D fighting, moves, projectiles, etc. And it's a technological feat as well, no one has ever achieved three dimensional digitized video before. Midway will also have the latest entry in its NBA Jam series, this one called NBA Hang Time, created by Mark Turmell and Sal Divine, the team responsible for the company's previous basketball titles.

Sega and Namco Battle On

The simulator wars continue between the two kings of the arcade hill. Sega showed Virtua On, a two-player deluxe robot combat game where most of the graphic artistry (using the Model 2 frameware platform) seems to have gone into elaborate backgrounds and lighting. Graphics were the strongest point for Sky Target, the one-player Sega jet combat game. Namco showed a two-player deluxe tank game called Tokyo Wars. It's a four-player linkable game, so multiple players can blast away at each other on the same virtual battlefield. There are two courses to chose from, and moving, reactive custom seats that push backward with each canon shot.

Konami Enters the Race

Konami's newest racer, Midnight Run, enables players to choose from three courses, selecting their car and choosing the stock or tuned version. (Watch out for the tuned-up jalopies, they're very fast.) You race other street machines through city nightscapes. Using a five-in-line shifter, you can switch back and forth between manual and automatic transmissions as often as you like during the race. Konami proudly claims this as "an industry first."

Generator

by Mark James Ramshaw

Can the current trend for publishers to buy up smaller development teams last, and it possibly be healthy?

Acclaim's recent buyout of high-profile development house Probe Software is just the latest in a long line of mergers and buyouts. Increasingly, more and more larger companies are buying up or merging with smaller outfits. It would seem that fewer, bigger companies now make up the game industry — compared to the multitude of small, independent developers that made up the business a few short years ago. The buying up of creative talent by companies with large pocketbooks is an alluring concept, providing a potential mix of financial muscle and creative genius. But is there a danger here that good ideas will be stifled, high-value licenses will once again be the most valuable commodity, and that safe concepts will be favored over potentially more exciting, though risky ideas? Are we entering a new bland era, like that of the movie industry?

As a consequence of such industry changes, Peter Molyneux at Bullfrog (which recently sold out to Electronic Arts) foresees that "we're going to see less original products getting released." Yet Bullfrog's deal with Electronic Arts last year is perhaps the most important acquisition of them all. "[Small independent companies] just cannot compete anymore in an environment where people are paying $4 million dollars for a game, and $10 million dollars on marketing a game," reasons Molyneux. "Amongst other things, EA offered a pooling of interests — so it's more of a merger than a straight acquisition. You won't see our products suffer, we're actually publishers now — so it's up to us what we release. In a way, I wish we'd done it earlier."

Richard Browne at Philips Media articulates the flip side of the coin, which is "in buying development houses there's an inherent danger of removing the creative spark through the "safety" that money brings. Independent groups put their life into the project," he continues, "so a game is ready when it is perfect, not when a corporation eyes the end of a financial quarter." Certainly, it's mere common sense that suggests that if the budget of a game increases, the less likely it is that publishers will take a risk on its content. And it's also fair to argue that the most truly innovative games of recent years have come from small independents (id Software's *Doom* is the classic example), whereas the majority of the big studio's output (Electronic Arts, LucasArts, Sierra, and so on) have been high on production values, but short on freshness or inspirational spark.

Browne does, however, see a solution. "Without this "spark," teams inevitably split from parent companies to form new independent groups, and that is where a great deal of talent is now emerging." This system of developers splitting away, forming their own teams, growing, then being absorbed into larger companies again can be seen time and time again; a perfect example is David Perry at Shiny Entertainment.

Peter Molyneux agrees. "It's a cyclical thing. In a year's time there'll be almost no independents left, but in three or four years time, I think we'll see lots of independent companies working on games again.

Let's just hope we don't have too many videogame designed by primitive corporations, and me losing sight of our own creativity."

Mark James Ramshaw is freelance journalist, software designer, and producer who writes regularly for far too many videogame and music magazines. E-mail him at mark@thespiralsun.co.uk

Datebook

May

The **Electronics Entertainment Expo**, a.k.a. E³, is, for all practical purposes, the main game industry event of the year, and will make its appearance at the Los Angeles Convention Center from Thursday through Saturday, May 16 to 18, when all of the biggest game companies will be there (Sega, Nintendo, Sony, Time Warner, Atari, the 300 Company, EA, Matsushita, et cetera) showing the newest games, newest systems, connectivity technology, arcade games, virtual reality (you name it, kid, they have it). This show is a must. For more information, please call 1 (415) 349-4300 or 1 (800) 315-1133, or e-mail http://www.mha. com/e3/. And for travel arrangements, please call 1 (800) 361-8191.

Orlando Consumer Electronics Show '96 (CES) will occur from May 23 to 25 at the Orange County Convention Center, Orlando, Fla. This is the big she-bang in terms of electronic game, new systems, stereos, walkie talkies, phones, CD-ROM and DVD developments, games, Internet/online services, and computer hardware, and well, face it, it's all there. The Orlando CES is open to the public. FAX: 1 (703) 907-7690. Call Travel Planners, Inc. at 1 (800) CES-5655 or (212) 532-1660 for travel arrangements, or e-mail housing@aol.com.

June

The first annual **I-Magic Awards Festival** has been moved forward and will be held this June 17 through 20 (not April 17 through 18), at the New York Information Technology Center, New York, NY. This event provides achievement awards for excellence in consumer relevant categories. Contact Bonnie Harper at 1 (212) 431-8923.

PC Expo in New York will host the inaugural **WEB.X**, the Internet Event for Business, Tuesday through Thursday, June 18 to 20 at the Jacob Javits Convention Center in New York. Featuring Internet, World Wide Web, e-mail communications, and more, this show is important for net junkies and business professionals. Contact the Blenheim Group at 1 (800) 829-3976 or 1 (201) 346-1400.

September

AMOA, the **Amusement and Music Operators Association**, will hold its annual event this year from Thursday to Saturday, September 26 to 28 in the Dallas Convention Center, Dallas, Texas. This event is open to the public, and will show the newest arcade games, redemption games, virtual reality games, pinball machines, jukeboxes, etc. the industry has to offer. For more information please contact Fred Newton at AMOA, 1 (312) 245-1021; or contact amoa@sba.com.

November

IAPPA, the **International Association of Amusements and Attractions**, is like a big arcade show except for the big simulators, rides, and amusement attractions, for which it's famous. Open to the public, it's held from the 20 to the 23 in New Orleans, LA, at the New Orleans Convention Center. Please call 1 (703) 836-4800.

History's most feared monsters and mutants are bolting from the arcade in search of a dark arena for their next midnight fight for supremacy. Victor's coming over with his shocking Thunderstrike. Felicia's tracking in plenty of dirt for her Litterbox Kick. Bishamon is swinging by his razor-slashing Divider. All the evil powers and devastating moves of the ten DarkStalkers you've come to fear are headed your way. Along with hidden special moves, mid-air blocks and super fatal blows to make your PlayStation™ smoke. So leave a light on for the DarkStalkers. And take down your dad's bowling trophies. Raptor's Flying Saw Blade has been slicing a little wild lately.

DARKSTALKERS™

CAPCOM

DARKSTALKERS™   WELCOME HOME.

Back Issues

Back issues of **Next Generation** are rapidly becoming collectors' items. A complete set is also an invaluable reference guide for anyone seriously interested in videogames

NG 1
• An interview with Trip Hawkins (president & CEO of The 3DO Company) • A comprehensive look at all the next generation systems • The Violence Tapes. Four of the world's most controversial game developers in one virtual room

NG 2
• Shigeru Miyamoto (creator of *Mario*, *Donkey Kong*, *Zelda*, *Pilot Wings*) • Saturn: The complete story so far • Gaming on the information superhighway (aka "Joyriding") • Revival of the Fittest. Why is retrogaming so popular?

NG 3
• Tom Kalinske (Sega US' president) • Does PlayStation live up to the hype? • What's wrong with the PC? (Part one). Can PC gaming survive? • Making tracks (aka the noble art of game music) • *Virtua Fighter*. Saturn's fighting chance profiled

NG 4
• Nolan Bushnell (the inventor of *Pong*, and founder of Atari) • Atari: from boom to bust, and back again. The complete history of the oldest videogame company in the world • An audience with Gumpei Yokoi, the inventor of Nintendo's Virtual Boy and GameBoy • What's wrong with the PC? (Part two). Where is the PC game scene heading?

NG 5
• Steve Race (Sony Computer Entertainment's former president) • Ultra 64: the story so far. Nintendo's 64-bit collaboration with Silicon Graphics is shrouded in secrecy. A 13-page exposé • Apple: The Ripe Stuff. The story behind Apple's new game machine, the Pippin

NG 6
• Peter Molyneux (Bullfrog's leader and possibly the smartest guy in gaming) • M2: 3DO bites back. On paper, Trip Hawkins' M2 is "10 times more powerful than the PlayStation." But can 3DO make it work? • PlayStation's Disciples: A look at how PS-X games are made

NG 7
• Sam Tramiel: Atari talks back (Atari's president & CEO) • 3DO: Past, Present, and Future. What has 3DO achieved so far, and what does the future hold for Trip Hawkins' vision? • Electronic Entertainment Exposition (E³) — the definitive show report

NG 8
• Howard Lincoln: Why the hell has Nintendo delayed Ultra 64? • Sega Saturn: What the TV commercials don't tell you...NG special Japanese RPGs: coming to a game machine near you • Previews of PlayStation's two-player link-up

NG 9
• So which 32-bit system is Electronic Arts betting on? An interview with EA's VP Bing Gordon • Reality Check: The Future of Virtual Reality — a full history, update, and thorough analysis of the state of VR • Saturn: Sega's battle plan to attract developers

NG 10
• Is this the end of FMV as we know it? An interview with Tom Zito, president, Digital Pictures • Do videogames screw you up? An in-depth look at the issues and solutions surrounding the strains of videogaming • Motion Capture: a report on the newest wave of capturing

NG 11
• Yu Suzuki, head of Sega's AM2 arcade division explains how he makes the best arcade games in the world • The Top 75 movers 'n' shakers in the gaming industry: who *really* wields the power? • Mind Games: the rise and rise of artificial intelligence in computer games

NG 12
• Chris Crawford — videogaming's self-proclaimed "Prophet in the Desert" explains the way games ought to be • Head to head: each and every game machine rated and compared. The most exhaustive, comprehensive and controversial feature in **Next Generation**'s history

NG 13
• Sega of America's President Tom Kalinske explains why Saturn can still win the war • 1995: the year videogames changed forever •1996: the year in profile. What are the major players predicted to do?

NG 14
• Silicon Graphics' George Zachary explains what's under Ultra 64's hood • Ultra 64: the whole story, complete with interviews with Shigeru Miyamoto and Howard Lincoln • Marketing: how Sega and Sony try to get into your brain

NG 15
• Sony Computer Entertainment's President (well, he was) Marty Homlish answers the charge that PlayStation cannot compete with Ultra 64 • The **Next Generation** Lexicon: a complete dictionary of gaming terms, from A to Z

NG 16
• An interview with the most famous Western game developer, Dave Perry • How to get a job in the game industry, a **Next Generation** feature • Exclusive coverage on Shiny Entertainment's new PC title, *MDK* • M2, is it any good?

Next Generation Back Issues (US Only)

Back issues **NG 2** through **NG 15** are $4.99 + $1.50 delivery. The Premier Issue, is **NG 1**, the Premier Issue, is $7.99 + $1.50 delivery.

Please Mail Check to: Imagine Pub, Inc • Back Issue Dept N695 • 150 North Hill Drive • Brisbane • CA 94005

GET A GRIP!!!

GRIP!!!
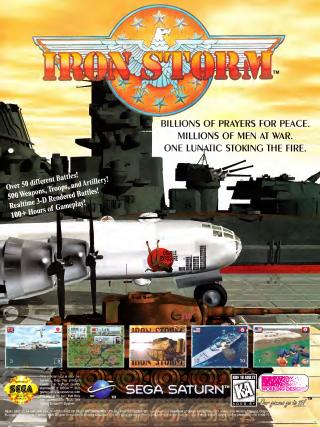
JOYSTICKS

PAST, PRESENT & FUTURE

Videogames "speak" via images on a TV. Twitches of a game controller make up the language with which players "speak" back. It's a basic dialect, but interactive entertainment would be impossible without it. And it's about to change forever...

Games have made paradigm shifts in the past 24 months into polygonal, 3D, texture-mapped, photorealistic, multiplayer interactive experiences. Meanwhile, the evolution of the best mechanism for controlling games — the joystick — has lagged. All that is changing now, as joysticks ready for their own launch into the next generation. In this definitive **Next Generation** report, we look at where the joystick has come from, where it is now, and where it's headed in the not-too-distant future.

The term joystick (which yes, was originally a slang term for penis — according to Websters' Dictionary) came into nonvulgar use at the dawn of aviation in England to describe the airplane flight yokes that controlled the elevators and ailerons of the craft, and were located between the pilots' legs. The first use of a "joystick" device not directly related to the control of an aircraft came during World War II (the same conflict that spawned the precursor to the digital computer). During the war Germans used joysticks to control experimental bombs, and after the war ended, joysticks became standard equipment for controlling unmanned test flights.

"German pilots experimented with wire-guided glide-bombs which they controlled with joysticks," said Paul Potera of the Strategic Development Division of ThrustMaster, a leading joystick manufacturer. "They were launched from bombers and had flares so that the Germans could see a little red dot which they guided down to the target." Since that time, the word has come to refer to any controlling device involving a stick which moves in at least two directions, even when that "stick" may be a flat, cross-shaped toggle-switch — more commonly known as a joypad. Nowadays, as far as common language is concerned, the term joystick refers to any nonkeyboard device for controlling a computer game.

The first computer game joysticks were made in 1961. That was the year Steve Russell, a member of the Tech Model Railroad Club at the Massachusetts Institute of Technology (a haven for the first computer hackers), created the first computer game *SpaceWar*. *SpaceWar* was

controlling

ANALOG VS. DIGITAL

When discussing joysticks, it is essential to note the distinction between analog and digital.

Analog joysticks are controllers with continuous and varying "resistive value." In simple English, the joystick can detect degrees of movement, as opposed to the simple "on" or "off" of a conventional joypad. In terms of videogames, this translates to a situation in which the farther you push an analog stick, the faster your character moves or the more sharply your car turns.

The steering wheel of a car is a good example of an analog input device. To merge into another traffic lane you turn the wheel slightly. You turn more sharply to go around a corner. To make a U-turn, you must spin the wheel as far as it will go. When pushing an analog joystick, a potentiometer (a variable resistor, like a volume knob) changes the amount of current running from the stick to the computer, enabling the computer to know exactly how far and in what direction the joystick has been moved. It's then a simple matter to translate this into game instructions. Also, by interpreting how fast it took the joystick to get from one intensity to another, additional effects — such as momentum — can be introduced to a game's mechanics.

If all this sounds

sophisticated, that's because it certainly can be. But don't assume that analog technology is necessarily complex, or indeed new. The old "paddle controllers," which drove *Pong* and games similar to it, are also analog devices, but with just one potentiometer able to control motion along only one

axis (from top to bottom).

"Analog joysticks have been part of the PC scene for 10 or 15 years, and they really haven't changed much in that time," says Scott Schulte, a product planner working in the Advance Consumer Devices Division of Microsoft. "They had two buttons, now they have four buttons; but the technology inside is basically

> **Up to 17% of a CPU's power must be dedicated to continuously checking the state of an analog joystick**

the same."

The disadvantages of analog joysticks, unfortunately, outweigh many of their advantages over digital controllers. Because they have such a huge number of possible positions, up to 17% of the CPU's processor power must be dedicated to continuously checking the state of the joystick. And this, unsurprisingly, can adversely affect game speed. Also, when using the standard PC game port, only four buttons, the stick, and a throttle can be supported at once, or two sticks with two buttons each.

Still, analog controllers are the norm on PCs, and work well in situations that need precise control, like driving games, flight sims, and even

Pong (try it: *Pong* or *Breakout* with a digital controller is an exercise in extreme frustration).

In contrast, digital

game controllers (such as the Saturn's and PlayStation's) feature the all-or-nothing language of binary notation. There are no varying degrees in digital signals; everything is black or white. The joystick senses if the stick is being pushed in a particular direction and passes that information on to the computer. To make Sonic or Mario run to the left, you press the left side of the D-pad. You cannot make either of them run faster by squeezing harder; they either move to the left or they don't. That's it. Clever programming and the timing of how long a button has been pressed can give the illusion of greater control (hold the left button down, and Sonic will accelerate to a run, tap the button and he will take smaller steps, for example), but the limitations are still huge.

Digital joysticks and joypads work the same way modern calculator buttons or computer keyboards do. On a printed circuit board in the casing there is a disconnected circuit. When the joystick is pushed in a certain direction, a small round pad made of conductive material presses down, completing the circuit, and sending a signal back to the CPU. This is also the way a joystick's fire buttons work.

Digital controllers are excellent for fighting games

Top to bottom: The first home controller, for the Magnavox Odyssey, Atari's Super Pong, Fairchild Video Command Stick, Vectrex joystick, and the classic paddle controller from Sears

36

and two-dimensional platform games, but they are less than suitable for driving or flying games (as anyone who has "lap turned" through a game of *Ridge Racer* can tell you).

The chief advantage of digital controllers for videogamers is that they are less expensive to build and more sturdy than analog joysticks. Also, on the PC anyway, digital joysticks don't suck processor power the way analog sticks do. Instead, the digital stick updates the CPU on its position every eight milliseconds, so more processor cycles can be devoted to the business of running the game itself.

A third control
technology has not yet been utilized in many game control devices, but this is likely to change over the next two years. The mouse (and some trackballs) use a method of control which has elements of both digital and analog sticks, and is similar to the method used by Microsoft's new SideWinder stick. Instead of using a potentiometer, the mouse uses an optical system. When the mouse ball moves, it spins one or two drums. Inside the drums are LEDs. As the drums spin, the light from the LEDs shines through holes in the drum to a light sensor, which then sends data back to the computer. Based on the speed and direction in which the drum spins, the curser moves appropriately on the screen. This enables extremely precise control using a more sturdy, cheaper digital mechanism. One which also needs no calibration.

It is rumored that the Nintendo 64 pad employs a similar technology. If so, it is sure to be simply the start of many PlayStation and Saturn owners can hopefully look forward to similar innovations.

a two-person simultaneous, competitive shooter, which featured controls almost identical to *Asteroids* (although, it being MIT, the game featured authentic star maps for the backgrounds and a couple of other hyper-realistic elements, including a deadly sun with real gravity and missiles that — in early versions at least — failed on a random basis). He built the game on a Digital Equipment PDP-1, and used toggle switches built into the computer readout display to control the game. To go left, for example, the player actually had to turn a "go left" switch on, then off again — a very cumbersome procedure.

Making matters worse, to use these switches, players had to lean forward on their elbows which proved to be an extremely uncomfortable and clumsy position from which to play. In an effort to make *SpaceWar* less painful, two of Russell's fellow hackers, Alan Kotok and Bob Saunders, scrounged spare parts from the model railroad clubhouse and created the earliest descendent of today's game controllers, a small box with switches and buttons on top.

"The basic version [of *SpaceWar*] was played off toggle switches on the console, and your elbows got very tired," Russell remembers. "Most people eventually ended up wiring in push buttons. The PDP-1 had a bunch of plug boards in the back that you could wire into, so it was a matter of punching in a few wires to hook up switches as input," he adds.

This step, replacing
uncomfortable toggle switches on a panel with push buttons on an easily reachable box was the first step in the evolution of the modern game controller, designed to give maximum control with minimal hassle.

Why hasn't *SpaceWar* received the accolades it

deserves as the forefather of videogames? Russell remembers the Digital Equipment PDP-1 on which *SpaceWar* was run as selling for around $120,000, far too expensive to create any kind of consumer game. Though later Digital models such as the PDP-6 came with *SpaceWar* already installed (it was used by Digital as the memory test), the game still had a very limited audience.

It took the coin-op
videogame revolution of the 1970s to bring joysticks to the mass market. Though *Pong*, the first commercially viable coin-operated video game, did not have joysticks (it worked with a one-dimensional paddle) a few other *Pong* knock-offs such as *Paddle Ball* did. *Space Race*, one of the early Atari arcade games,

Yes, according to Websters' Dictionary, the term "joystick" was originally a slang term for the penis
also used joysticks.

Joysticks took a similarly long time to reach widespread acceptance in the home console scene. The first home systems, such as the Magnavox Odyssey 100 (an analog videogame system) and Home Pong, were dedicated ping pong machines controlled with twisting knobs. It was only by the time the Atari 2600 Video Computer System (VCS) reached its apex in the early '80s that there were three main ways to play videogames: with a paddle (*Pang*); a push button (*Defender*); or a joystick (*Pacman*). And it soon become abundantly clear that the joystick-plus-button(s) combo was clearly the most flexible and intuitive (and hence dominant) control mechanism for electronic games, a situation

The classic Atari 2600 controller, keyboard for 2600 BASIC cart, M Network TRON stick, Suncom stick, and the Intellivision control disc "complete" with keypad

controlling

that remains to this day.

There were still a few subtle evolutionary steps, however, between the joysticks of then and the game controllers we play with today. In 1980, while most of the industry continued using standard variations of the joystick, Nintendo introduced a patented four-way directional "pad" on one of its earliest consumer electronics products, Game & Watch. It holds the patent on this type of directional controller to this day. In 1981, Bandai Electronics used a similar controller which it called an "eight-position action button" on a handheld game called Space Chaser.

Although directional
pads were initially developed because they were more compact than joysticks, it was discovered that they were also much more comfortable to use. While a full-sized joystick worked great in the arcade, holding a smaller joystick in your hand for hours at a time tended to cause cramps. Perhaps the designers of the Mattel Intellivision took this into consideration, since theirs was the first home console system to use a direction pad, which they called a "control disc." Mattel executives said it had the "functionality of both a joystick and a paddle." It didn't, but that's beside the point.

Meanwhile, the Atari 5200 introduced a bold new development in joystick technology, a joystick that did not snap back to a center position when it was released. It was not even a mild success. In fact, it was perhaps the biggest failure ever in game control, if not videogaming in general. The Atari 7800 controller featured a long, slender base with a stick at the top, designed to keep hands from cramping. Again, nice try, but the stick hurt one's hand almost as much as the 2600's clunky design. ColecoVision

had no less than four controllers available for its system, from a mini-joystick to a steering wheel, a trackball, and a larger "super action controller," which was a unit featuring a handle with trigger buttons, a keypad, and a small joystick on top. Which console had the best joystick became an academic concern after 1983, when the market crashed and gamers deserted in droves to personal computers.

Even when videogames did re-emerge with the NES and then with the Super NES and Genesis 16-bit era, the joypads were essentially the same. Sure, the Jaguar and Super NES added considerably more buttons, but the basic joypad format had been established.

It took the coin-op videogame revolution of the 1970s to bring joysticks to the mass market

Even the 32-bit era of controllers (PlayStation included) are merely reworkings of the same basic design that Nintendo patented 15 years ago. Imagine how dull videogaming would be if graphics or sound had improved so little over the same period?

On the PC side,
keyboards and joysticks have traditionally remained the only game controllers of choice for computer players. In fact, until the latter half of the 1980s, most computer joysticks still had the same stem-and-swivel design used by the Germans in World War II.

More importantly than just in design, computer and console joysticks differ fundamentally in the way that they give information to the CPU. Until very recently, most console controllers were

digital, and most PC controllers were analog (see page 36).

Microsoft inadvertently set the direction of personal computer peripheral design forever with the release of Flight Simulator. More than any game before it, Flight Simulator demonstrated both the PC's ability to handle realistic flight simulations, and the standard joystick's inability to handle all the range of player input needed to get the most out of the software. As more sophisticated flight simulations hit the market, CH Products, ThrustMaster, and a slew of competitors released more realistic controllers, lending an "aviation bias" to the whole PC joystick industry that continues to this day.

In 1987, CH released the Flight Stick, which was, for the time, an extremely realistic-looking analog joystick. In 1990, ThrustMaster released the Weapons Control System, a throttle with programmable buttons that replaced keyboard commands. Later that year, an engineer at ThrustMaster named Frank Bouton designed the first joystick with the oddly titled "coolie hat," a four-way button at the top of the stick used for targeting and sight control. The coolie hat was included on the Mark I, ThrustMaster's first joystick. Capitalizing on the hot flight sims market, CH Products released the Flight Yoke. The Flight Yoke, which looks like the yoke of an airplane, was wonderful for Microsoft Flight Simulator and driving simulations, but not well suited for military flight games.

With the increase in
the PC's penetration into US households, the pace of advancement in PC joystick technology has quickened.

"The industry has really moved forward the past two or three years," says Greg Stearns, CEO of CH Products. "Consumers are saying three

things: First, 'we want functionality.' Second, 'we want realism.' And third, 'we want programmability.'" To that end CH Products, Thrustmaster, Logitech, and SunCom, the leading PC joystick manufacturers, have all been serving up ever more realistic looking sticks and throttles (and foot peddle rudders) with more and more customizeable buttons on them.

"What we have done is tried to look at the needs [of the consumer] from a realistic point of view," maintains CH Products' Stearns, "and that gives us the joystick, the throttle, and the rudder peddle. You may say 'Gee, that's an aviation point of view,' and to a certain extent you're right, but if you look at how you can control a game, there are only a couple of ways to do it. Until you start having speech activated games, you're going to be stuck doing things with your hands and feet.

"So, we think, that's the ultimate system right now: a controller for the hands, translation: a joystick and throttle; with a foot controller, translation: a peddle."

He's right, of course. It's worth realizing that the military and aeronautic industries have spent many years and many billions of dollars working out how complicated machinery can be best controlled by human bodies. They came up with the joystick/pedal system — so why shouldn't the game industry copy the experts?

Still, other specialized peripherals have evolved. In 1993, Sports Sciences released the Pro Swing, a laser golf club that works with Access Software's popular *Links* golf games. In the beginning of 1994, ThrustMaster released the Formula T-1, a steering wheel and foot pedals for driving simulations. Last year ThrustMaster also released the Wizard, a peripheral for playing

computer pinball.

You can even buy digital, Nintendo-style game pads for personal computers. The Gravis Game Pad, one of the first and probably the best PC game pad, has enjoyed steady sales for several years. As companies like Capcom, Sega, and Williams port arcade games to PCs, these controllers will see even faster sales.

As more and more

powerful computers have become prevalent in the home, and the 32-bit videogame era has replaced the old 16-bit consoles, the pace of joystick innovation has increased on several fronts, particularly over the past 24 months. It had to. While standard digital joysticks

Nintendo introduced the four-way "pad" with its Game & Watch series. It holds the patent for this type of controller to this day

are fine for side-scrollers, and analog sticks are great for traditional flight sims, new paradigms of gameplay are starting to emerge. Paradigms previously held back, perhaps, by the lack of appropriate control mechanisms. What good is it to have a 3D world if you have to explore it with a 2D controller? And increasingly, designers are starting to question the point of a hyper-realistic driving sim if you can only see and hear — but not *feel* — the action. Even for traditional games, there is always a new step that can be taken in control.

When creating a

new mechanism of control, the old chicken-egg catch-22 is that no one wants to develop for a

new controller until it has a substantial installed base of users, which won't gain, of course, until there are some killer games which take advantage of it.

Surprisingly, the best hope of defeating this vicious circle lies with a company perhaps known more for co-opting others' technology than for creating its own — Microsoft. The DirectControl API in the game development SDK for Windows 95 lends itself to the support of innovative control mechanisms. The importance of this really cannot be overstated. By having Microsoft provide the driver for new controllers, a programming hassle is eliminated, and a potential installed base of more than 10 million Windows 95 owners is handed to joystick developers on a plate. With the possible exception of providing a standard for 3D graphics acceleration, the enabling of novel control mechanisms is one of the best features of Windows 95, and one for which Microsoft deserves serious credit.

Another reason that Microsoft is especially eager to talk about joystick innovations these days is because now it has one, too — the SideWinder 3D Pro. This new stick uses an optical technology Microsoft says provides faster and more dependable game control.

Microsoft has removed the gears, resistors, and potentiometers (think of them as volume knobs) used by ThrustMaster and CH Products, and replaced them with a light emitting diode (LED) optical system. Tiny photosensors, placed in the base of the SideWinder 3D Pro, track the position of an LED on the bottom of the joystick and translates these movements into electronic impulses. Although similar to the way a mouse works, the method is a unique, patented design. According to Microsoft,

The original NES pad, Mattel's PowerGlove VR toy, the four button NES Wizardry controller, the Thrustmaster joystick, and the button-laden throttle unit

controlling

this optical system is both faster and more dependable than potentiometers, while enabling it faux analog or digital functionality in one stick — without the processor overhead or limited number of buttons of a true analog stick.

In typical Microsoft style, the designers of the SideWinder 3D Pro have also packed it with an unending list of features, some of which are impressively innovative. The stick twists as well as swivels, enabling it to perform some of the functions of foot pedal systems like the ThrustMaster Rudder System. It also has a lever that works like a throttle.

Although the SideWinder's simple lever cannot perform half the functions provided by sophisticated throttles manufactured by ThrustMaster and CH Products, and the twisting motion cannot equal the fine sensitivity of true rudder pedals, it's a good start. Additionally, it only costs about 25% of a full ThrustMaster or CH Products set-up with joystick, throttle, and pedals.

Meanwhile, Sony and Sega both have released or announced analog control sticks for their next-generation platforms. Even third parties, like Mad Catz, with its PlayStation analog steering wheel, or Namco, with its bizarre twisting Negcon, are getting into the analog act.

On the PC, Advanced Gravis is using its PC game pad technology to the next level with its Gravis Interface Protocol (GrIP). Basically, the system looks like an L-shaped multitap, with six ports on it, four for custom Gravis pads and two pass-through analog ports (for traditional PC joysticks). The GrIP is a fully digital interface which enables four players to compete simultaneously on a PC, using eight-button pads. Although the GrIP sounds deceptively unimpressive to console

gamers (and we still maintain that anyone who hasn't experienced four-player *Super Bomberman 2* on the Super NES hasn't played a videogame) it's revolutionary for the PC, and should help usher in a new era of multiplayer PC games.

The most impressive steps toward analog control on a console system, however, have come from Nintendo, for its forthcoming Nintendo 64. Indeed, it is Nintendo 64's sophisticated controller that excites Nintendo President Hiroshi Yamauchi most about his new baby. At a speech he gave after unveiling Nintendo 64, Yamauchi told the press that "If you [the press] think this is just another controller, you

> # Game designers are starting to question the validity of a hyper realistic driving sim if you can only see and hear — but not *feel* — the action

don't know anything about videogames." Serious stuff.

One of the things that makes the Nintendo 64's "Bat-a-rang"-shaped controller so special is that it has both analog and digital functions. This three-handed controller has a traditional Nintendo D-pad over the left handle and a thumb-sized analog joystick over the center.

"There are three types of directional devices on this controller," says Nintendo's Genyo Takeda, whose R&D3 team created the device. "One is a cross-key. It's the conventional device Nintendo invented. Many people tell me it's kind of common sense to use." Indeed, a whole generation of gamers would be lost without it.

"This is the Famicom position — Super NES position — using the crosshair," Mr. Takeda explains as he holds the controller by the outside handles. He goes on to hold the controller by the left and middle handle and then by the right and middle handle. "You can also hold it using the left position and using the right position. Each way gives you a different kind of controller, so we will probably [explain which controller position to use] in each game," he says.

Typical of Nintendo's tight-lipped security, Mr. Takeda refuses to reveal much about the inner workings of the new controller. He admits, however, that the center joystick is not really analog by the strictest definition of the term, but that it has been engineered to emulate an analog joystick. *Next Generation* was unable to confirm at press time (we didn't have one to take apart) rumors that Nintendo 64 "analog" controller is actually an optical one, like the Microsoft SideWinder.

According to Mr. Takeda, R&D3 experimented with several game controllers before settling on a final product. "We tried many different types [of controllers] and prototypes and we threw them away," says Mr. Takeda. This is not surprising. Along the way to any high-tech revolution (and game controller technology is no exception) there are always evolutionary dead ends and products introduced too soon for their own good.

"We tried a motion-sensor wristwatch," explains Mr. Takeda. "We even went so far as to make a prototype and applied for a patent. Everything was good. But players didn't understand the internal mechanism and they had trouble controlling it, so we abandoned it."

The original Genesis three-button pod, the Super NES controller with six buttons, the Genesis mouse for RPGs, the Neo-Geo arcade joystick, and a light gun

controlling

NEXT GENERATION May 1995

Indeed, the road forward in game control is littered with the wrecks of failures. If the Atari 5200 was the first massive commercial control failure, it was certainly not the last. Sega tried for budget "VR" appeal with its Activator, a hexagon device that sat on the floor and (supposedly) sensed body movements (such as punching and kicking), translating them into game commands. In addition to making the user look like a fool, it worked woefully inaccurately and was supported by only a few dedicated titles.

Another glorious failure was the DataGlove, from Mattel. It was another "VR" controller that certainly looked cool, but didn't really offer anything more than a regular Super NES pad (in the way of game control, at least). In fact, it did less, making it a cumbersome, inconsistent novelty. Still, years later however, the data glove concept refuses to die. "We've taken a look at a data glove," admits CH Products' Stearns, "but it's so doggone expensive that until the price comes down, it just doesn't make a lot of sense."

Perhaps a more damaging control failure was the CyberMan, from LogiTech. Although it was nominally a six-degrees-of-freedom controller (a device capable of controlling objects in real 3D space — up and down, as well as north, east, south, and west) it was expensive, poorly made, and largely unsupported. At the Computer Game Developers' Conference in March, 1994, LogiTech could not give them away.

The failure of the CyberMan probably set the adoption of 3D control in the guise of six-degrees-of-freedom joysticks back several years. "A lot of people spent a lot of money [on the CyberMan]" says Stearns. "They got screwed and they're kind of

saying, 'I'll never do that again.'

"A six-degree-of-freedom joystick is a good idea," Stearns continues, "but until you can refine it a little bit better and then convince the public that it's something it should have, then it will never really sell. So the next one that comes out on the market has to be very well thought out and it has to work really well," he concludes.

So, true 3D control

remains elusive, which is somewhat disappointing, considering that back at the dawn of videogaming the Fairchild Channel F (an obscure Atari 2600 precursor) had a controller that — technically, at least — offered six degrees of freedom. (There were,

A more damaging control failure was the CyberMan. At the 1994 Computer Game Developers Conference, LogiTech literally could not give them away

however, no games that took advantage of this ability. But this was not a surprise, since its graphic ability paled even next to the 2600.)

Still, we are getting closer. The PlayStation controller, impressive because of its ergonomics alone, has a set of four shoulder buttons arranged in a two-by-two matrix, which enables it some rudimentary 3D control when paired with the D pad. The diamond shape of the standard buttons could be easily used as another D pad for 3D control as well.

But more than any

other advance in controller technology, force feedback joysticks promise to open up

whole new ways of experiencing a video or computer game. "It's basically a joystick that is an input device, like a traditional joystick, but also an output device — the computer can command forces to the joystick handle and create a while variety of different sensations," explains Louis Rosenburg, president of Immersion Corp and designer of Immersion's force feedback technology. How does it work? "There are actuators [mechanical devices] on each of the axis," explains Rosenburg, "so the computer can independently command a force to the X or the Y axis. It's much more sophisticated than a traditional joystick. It has its own microprocessors, actuators, power, and electronics to drive the actuators. Essentially, it's a robot. Indeed, the best way to think of it is as a robot that looks like a joystick that sits on your desk," he adds. Exos and some others are also working on force feedback devices, but at press time, only Immersion has inked firm production deals with leading manufacturers.

To understand how it feels to use this kind of controller, imagine that you're moving a dot around a TV screen (as in one of the simple demos Immersion has developed to show off the technology). Also imagine that on the screen are several "springs" (triangles touching end to end). As you move the dot against the spring and press "down" you begin to feel resistance from the stick, which changes in a realistic way as you push further down on the spring. The force also changes depending on the type of spring. Another demo puts a "puddle" (a blue circle) on the screen. Moving the dot around most of the screen feels exactly as you would expect, like moving a mouse pointer. But when the dot is in the puddle, moving the stick produces a sensation identical to that of

An arcade-style stick for Super NES, the F-16 Flight Stick from CH, a clunky Jaguar pad with key pad, the uncomfortably stiff 3DO pad, and a Japanese Saturn pad

41

controlling

stirring paint. It really has to be felt to be believed.

In another demo, players control a paddle, à la *Pong*, with one key difference — the paddle is made of "rubber" and the ball bounces from it. The further it bounces, the more reactive force you feel when it hits. The combination of visual cues with physical ones makes the experience more truly immersive than any advance in graphics or processor technology *Next Generation* has seen. Playing two-player *Pang* with force feedback joysticks enables players to go out and physically wrestle with an opponent for the ball. Even with extremely simple line

The technology exists for an entirely new type of game, where feel replaces graphics as the premium experience delivery mechanism

graphics, force-feedback *Pang* beats anything the 32-bit systems can offer on their own — in terms of true immersion and a feeling of realism.

"Basically the simplest game in the world becomes very, very interesting when you add force feedback to it," says Rosenburg. This could be the understatement of the year. Certainly, the effect is much less impressive when outlined on paper than actually experienced. When described active feedback, most people instantly think of arcade controllers (such as *Daytona USA*'s steering wheel) that offer resistance to turns and shake when you crash, or guns that stutter with each shot. True force feedback can handle those tasks easily, but it

provides much more than that.

"The way current joysticks work in the arcade, they're not really doing modeling of sensations, they're just sending out this canned routine that the player feels," says Rosenburg. (For example, the *Daytona* player gets the same "jerking" every time he hits a wall, no matter how fast he's going or what kind of wall it is.)

"What we can do is really model the dynamics of what it should feel like when a car bumps into a wall, or when a ball hits into a paddle," he adds. "Our device has far higher performance. It's sort of like the difference between the fidelity of a Sound Blaster — where you can create music — as opposed to an old PC speaker that just makes buzzes and beeps. We can simulate the real physical dynamics of anything: gravity, a texture, a spring, a rubber band. We can simulate mathematically what those things are like so it will feel real, exactly like a real spring or rubber band or whatever," he concludes.

CH Products' CEO

Greg Stearns sees active force feedback as the next level in computer games. "Right now we amaze the eyes and the ears. Now, with force feedback, we can add one more thing to the list of 'feel goods.'"

Not only will this technology enhance existing games — enabling you to feel the road conditions in *Sega Rally* or *Ridge Racer*, or turbulence and g-forces in a flight sim, it should open the way for entirely new types of games, where feel replaces graphics as the premium experience delivery mechanism. Gamers can then look forward to a true revolution in gaming.

And then the next step?

"You don't have any smell things out there," ponders Sterns. "Maybe there will be software you can smell, I doubt it, but…"

he joystick you see on the right is a prototype from Immersion Corp. for a force feedback joystick. At least one major PC joystick manufacturer plans to have a joystick based on Immersion's force feedback technology on shelves by the end of 1996. Even Sony, Sega, and Nintendo are considering licensing deals, although it will be a while — probably at least until 1997 — before we see force feedback-based peripherals for console systems. Microsoft is also extremely interested in the technology and will probably be incorporating drivers for the device into the DirectControl API for Windows 95.

We spoke to several game developers to gauge their enthusiasm for this new technology. According to Thatcher Ulrich, vice president of software at CyberGear, "I think it's great stuff. It adds a whole dimension of tactile feedback which we really haven't had before except in some arcade games."

Shiny Entertainment's David Perry is worried about price, though. "I think it's great and I'm all for it — I'll back it 100%. But the question is, will people buy it? People will not pay $150 for a joystick. It's not that they shouldn't, but they won't — not in a million years."

Randy Breen, executive producer at Electronic Arts, sees the stick bringing more people into games. "There are a lot of people who [find games] too difficult and they give up. If, however, they have some other sensation that allows them to control the car more effectively it's going to make the game more enjoyable for more people."

Anyone interested in getting the force feedback API for Immersion's joystick should call Immersion directly at 1 (800) 893-1160.

The US Saturn pad, the Sony PlayStation pad, an analog steering wheel for PlayStation, the twisting analog Namco pad, and the Nintendo Virtual Boy pad

COMING SOON!!

> "We can simulate the real physical dynamics of anything; gravity, a texture, a spring, or a car crash"
>
> Louis Rosenberg, Immersion Corp.

A prototype of an Immersion force feedback joystick featuring pistol grip. Visible underneath joystick are actuators. The heavy base anchors the unit to keep it from moving during use

The Gravis PC stick, the Saturn analog flight stick, the Microsoft SideWinder stick, an IR cordless joystick for the PC, and the Nintendo 64 analog/digital pad

YOU'LL TAKE MALONE TO THE HOLE.

YOU'LL DRAIN THREES AT THE BUZZER.

YOU'LL BE IDOLIZED BY WOMEN.

YEAH. AND THEN YOU'LL WAKE UP.

U R NOT

KIDD

EWING

HARDAWAY

OLAJUWON

KEMP

HILL

Shoot out

Okay, rookie. Here's

all the 3-D realism,

other wannabees--uh,

the basketball game

your chance to go up against the big boys. Play for an entire season. Find yourself man-to-man with

intensity and sweaty, stinky action of playing in the NBA. And, with Multi tap, you can even link-up with seven

we mean *players*, too. With over 300 NBA players and real plays, NBA Shoot Out is, without a doubt,

of your dreams (which, let's face it, is as close as you're ever gonna get to the real thing).

HEY DUDE! It's Real Simple!
Join the PLAYSTATION ZONE CLUB.
It doesn't get any easier!

For every 2 PlayStation games* get the next one at 50% OFF.*
(way cool)

AND YEAH! — Don't forget to reserve your copy of

MLB PENNANT RACE and **NBA Shoot Out**

for

PlayStation

Where else are you gonna go?

electronics EB boutique

CALL 1-800-800-5166 for more info any time 9am - 8pm, m-f and 9am-5pm, sat est.

Second-generation **PlayStation** Capcom **multi** Time Gate **PC** Time Commando **PC** Tomb Raider **Saturn**
Decathlon **3DO** Devil Summoner **Saturn** Red Baron II **PC** Die Hard Trilogy **multi** Iron Rain **Saturn**

NEXT GENERATION May 1996

a l p h a s

Game previews, perhaps too intense for young children

I s Sony holding back, or has it shown us all there is to see? This month we take a look at *Tenka*, plus *Wipeout 2* and other notable titles in the PlayStation's second wave. Not wanting to be accused of bias (ahem!), we've also got *Tomb Raider*, *Devil Summoner*, and *Magic Knight Rayearth*, three interesting titles that push Saturn in new, untried directions

Tenka

It's the smoothest 32-bit 3D environment yet seen. An exclusive Next Generation report

Tenka features one of the coolest cyberpunk protagonists yet seen, and a bunch of weapons (but, of course...)

Format: **PlayStation**
Publisher: **Psygnosis**
Developer: **Psygnosis**
Release Date: **Early 1997**
Origin: **U.K.**

NG: At what stage of the development process is *Tenka* right now?
Martin: It's only about 30% complete. We have all of the environment display system in place, along with character display and control. It's now mainly a case of plugging in environments, populating them with characters, and implementing the puzzles.
NG: What percentage of PlayStation's overall power do you think *Tenka* will exploit, compared to say, *Wipeout* or *Destruction Derby*?
Martin: *Wipeout* and *Destruction Derby* were very technically accomplished for their time, but they did not utilize all of PlayStation's inbuilt features. There was no realtime light-sourcing, or Gouraud shading, for example.
NG: Do you feel that the ease with which many novice developers have been able to get respectable results from the PlayStation is an indication of the system's lack of complexity?
Martin: The lack of complexity of the PlayStation's development environment is by no means a limiting factor. It basically means that new developers can get up and running, and producing reasonable software in a short amount of time. Meanwhile, the more accomplished developers don't have to worry about programming trivial pieces of code and can get down to more complex, time-consuming code, without

"Wipeout and *Destruction Derby* were technically accomplished for their time, but they did not utilize all of PlayStation's inbuilt features"

Martin Linklater, Psygnosis

The Tenka team has spent two years developing and refining its Softimage-based 3D engine. Now it's just a simple matter of designing the levels

Tenka, the working title of Psygnosis' forthcoming first-person shooting game, looks destined to be rivaled only by Id Software's own *Quake* as the year's most anticipated first-person shooting game. The fruit of more than two years in development, *Tenka*'s 3D engine is complete and running smoothly. It's now just a matter of designing all the levels and introducing the enemies. *Tenka*'s senior programmer, Martin Linklater, is keen to point out that the game is still at a very early stage of development, and that the screen-shots you see here are just early representations of what the finished game will look like. Next Generation talked with Martin at Psygnosis' UK headquarters.

Of course, no first-person shooter is complete without a rogue's gallery of bad guys. *Tenka*'s enemies will be based on fully 3D, polygon-based models

Only when you see *Tenka* moving can you really appreciate how basic the *Doom* world really is. With curved surfaces and multiple ceilings, *Tenka* really raises the stakes

it eating into their deadline too much.

NG: *Tenka*'s game engine — even at this early stage — is generating the most impressive realtime 3D worlds yet seen on PlayStation. How have you been able to achieve this?

Martin: Normally, with realtime 3D game engines, the source of the problem is a custom-written 3D construction tool, while with *Tenka* we exclusively use *SoftImage* as the construction tool. This enables the artists to use the power of *SoftImage* to create stunning graphics without the normal restrictions that a custom editor would impose. Saying that, we have written a suite of custom *SoftImage* scene extraction utilities — and all the realtime code from scratch.

This basically means that the system is written so that the programmers accommodate the talent of the artists, rather than the artists being restricted by a "programmer-designed" system.

NG: Comparisons with *Doom* are unavoidable. Can you explain the differences in the ways the two games create a "3D" environment, and why you feel the *Tenka* way is superior?

Martin: *Doom* uses a 2D map system, giving each "zone" of the environment

certain characteristics (floor height, ceiling height, lighting level, etc). This means that things like nonvertical walls, floors above floors, and complex environment objects are hard — if not impossible — to do. *Tenka*, on the other hand, uses a full 3D environment editing tool which enables us to quickly construct very complex environments which can contain a wide and varied range of features.

Tenka also features fully-lit 3D characters which interact with the environment realistically. Things like attenuated point light sourcing and local lighting models greatly enrich the feeling that things are "in" the environment we have created. One of the things we tried to eliminate from *Tenka* was the mix-and-matching of 2D bitmaps and 3D environments. Everything in *Tenka* is real 3D.

NG: How will *Doom* players find *Tenka*'s gameplay to be different?

Martin: The environment design offers greater levels of realism, and the game itself introduces a history of events and an evolving plotline.

NG: *Tenka*'s game engine — even at this early stage — is generating the most impressive realtime 3D worlds yet seen on PlayStation. How have you been able to achieve this?

Martin: The current design for the game does not lend itself to a two-player game. We have chosen to concentrate on a single-player game — which would be the most played version anyway.

> "*Tenka* uses a full 3D environment editing tool which enables us to quickly construct very complex worlds"
>
> **Martin Linklater,** Psygnosis

Formula One

| The most impressive |
| 32-bit racer yet warms |
| up for a summer release |

ALESI

Actual F1 game shots (above) come closer to the sophistication of the prerendered intro stills (left) than ever before

Format:	**PlayStation**
Publisher:	**Psygnosis**
Developer:	**Bizarre Creations**
Release Date:	**July**
Origin:	**U.K.**

After the success of *Ridge Racer* and *Sega Rally* in 1995, it already looks as though the videogame industry's love affair with motor sports is set to continue with Psygnosis' new, officially licensed Formula One sim. Benefiting from
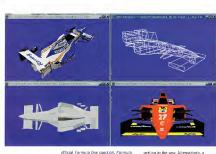
"We can shift 150,000 fully-textured polygons per second. About 20% of these are Gouraud shaded. How much would an equivalent PC cost?"

Sarah Dixon, Bizarre Creations

Each car featured in the race is an accurate representation of the real life Formula One equivalent. Performance stats are based on the 1995 season (left)

TV action replays are shown from exactly the same camera positions that the real Formula One broadcasts use. With the exception of cigarette ads, even the same billboards will appear on the sides of the track

official Formula One sanction, *Formula One's* car dynamics are accurately modeled on the reactions of a real F1 vehicle, with all values included into the simulation taken from actual car measurements.

In terms of circuit realism, the game looks to be similarly unparalleled. *F1* will include realistic weather conditions reflecting the season in which the race is taking place, as well as the country. In addition, the creators have taken track data from accurate site measurements, transposing their findings into textured 3D circuit models, with some of the largest notching up 90,000 polygons.

The Formula One license has also enabled the designers to employ and include all the rules and regulations pertaining to Formula One driving — including the flag system, car regulations and, best of all, racing etiquette. The license has also enabled *F1* to feature all 17 tracks, all 13 teams, and all 26 drivers. Each driver has his own personality, aggression and driving style — just like real life.

Bizarre Creations claims that this level of detail does not affect the frame rate, with a slick 30 *Hz* update putting the equivalent. F1 experience on the PC.

Stressing the

immediacy of the game, *F1* can be played as a straight-forward arcade racer without all the sim-style stuff (pit stops, tire selection, downforce settings, etc.)

getting in the way. Alternatively, a selection of sim elements can be chosen from the full list on offer. Even such concepts as aerodynamics and tire composites will be explained in the game, giving players a unique insight into the workings of the sport.

Next Generation talked with Sarah Dixon of Bizarre Creations:

NG: To what extent is *F1* building on the success of Psygnosis' other PlayStation racers, Wipeout and Destruction Derby?

Sarah: If we had asked for assistance, Psygnosis would have made it available. However, *F1* is using a different 3D engine and rendering methods to Psygnosis' other PlayStation titles, which means that when discussing general problems encountered with a new machine, we have had to develop our own systems.

NG: How have you managed to balance both an enjoyable gaming experience with a realistic racing simulation?

Sarah: The number one priority for any game developer has got to be playability. If a game is boring, unplayable, or badly designed, then it can have all the features in the world, but it won't be enjoyable. So first, we aimed to produce a playable game with fast-paced action for the arcade player and enough depth in the advanced mode to satisfy the older or more experienced gamer. Next on the agenda was the realism — from the intricate detail and accuracy of the circuit model, to the dynamics of the car, to give a realistic driving experience.

Nothing can stop him now

The UK version of *F1* will feature the comments commentary and play-by-play of BBC's very own Formula One presenter, Murray Walker. Evidently, Murray is famous in the UK for picking out drivers in the race for specific praise, or observing that someone's victory is certain, only to have that same driver crash spectacularly within seconds of Murray's comments. A blessing from Murray is the equivalent of being featured on the cover of *Sports Illustrated*. You've been warned...

Murray Walker, the UK's walking equivalent of the infamous *Sports Illustrated* "curse"
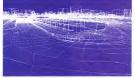
ng alphas

From 2D plan to 3D wireframe model to finished track (bottom to top)

NG: In what ways has the official endorsement of Formula One helped the game?

Sarah: We have been able to call on the teams, circuits, and even TV stations to assist us in an official capacity. Without official endorsement, we could not use any real circuits, drivers, cars, or even use words like Grand Prix, or Formula One.

NG: What are your opinions of PlayStation as a game platform?

Sarah: We're currently shifting 150,000 fully textured polygons per second, with about 20% of these Gouraud shaded on a sub-£300 machine; how much would an equivalent PC cost?

And the machine is still surprising us. We've recently put in the code for the starting grid set-up (26 Gouraud shaded cars on one of the most detailed parts of the circuit) and we were cringing when we first tried it out, waiting for the game to drop a couple of frames. But it didn't! As you see all 26 cars heading into the distance at 30 frames per second you realize how powerful the PlayStation is.

"As you see all 26 cars heading into the distance at 30 fps, you realize just how powerful PlayStation is"

Sarah Olson, Bizarre Creations

NG: To what extent is the PlayStation's rigid development environment limiting innovation on the system?

Sarah: The development environment has vastly improved since the early days of the machine, and therefore developers new to the system can achieve good results with little experience, which benefits the game. However, as you get to know your way around, you learn to write your own formats and routines to work in conjunction with the Development Libraries, which are in turn being developed and improved.

NG: What aspects of *F1* do you behave push PlayStation the most?

Sarah: Generally, we hope to achieve a level of accuracy and attention to detail that's higher than in any other game. We feel that the graphics are visually more impressive than the current racers, and being based on the real thing, are also closer to what you would see on ESPN. In terms of polygon power, we think that we are processing and drawing more polygons than the current racers, especially with the considerable number that are Gouraud shaded.

NG: From what you've seen of Nintendo 64, how do you feel *F1* on PlayStation will compare to whatever racing games Nintendo may release?

Sarah: Well, *F1* will be available before September! Seriously, it's difficult to compare because Nintendo is so secretive about what its plans are. One obvious advantage we're going to have over any N64 game is the sound. We have 45 minutes of CD quality music, including licensed tracks from Joe Satriani and Steve Vai. Add to this more than 25 pages of various commentary script from authentic commentators and you can see why *F1* is essentially a CD-based game. **ng**

The decision to accurately recreate real F1 cars and drivers means that F1 the game will have built in difficulty settings. Elect to play as the champ or a no-hoper — the choice will be the players

HAKKINEN 1:25.761   BLUNDELL 57.8

F1 is as near as PlayStation owners may get to Sega AM2's *Virtua Racing*

Sentient

Format:	**PlayStation**
Publisher:	**Psygnosis**
Developer:	**Psygnosis**
Release Date:	**October**
Origin:	**U.K.**

As games become more graphically complex, smart game developers are beginning to create complex artificial intelligence interaction sequences that deliver new gameplaying experiences.

The basic thrust of *Sentient* is this: The player is the captain of a space station that has become damaged and is going to crash into the sun (this is bad). Your goal is to fix the ship and get you, and as many people as you can, out of danger as soon as possible (this would be good). Unfortunately,

Explore the strange world and discover scores of lethal plots

there are several subplots running parallel to the main story that pit the crew against each other — and often you as well. Players will need to discover what is really going on, and possibly even to choose sides in the various ensuing conflicts. Combat is always an option, but randomly killing people will ensure that you are unable to gather the data you need to finish the game.

Sentient's real charm is in its realistic approach to conversation — characters in the game will talk

One of *Sentient's* greatest challenges is in attempting to piece expressions on the faces of texture-mapped polygon characters

to each other even when you aren't around, and will react to your character differently depending on how he has acted in the past. The end result is a fairly believable cast of characters set into a three-dimensional world.

ng

The City of
Lost Children

Creative camera angles and a dark environment set the game's tone

Format:	**PC**
Publisher:	**Psygnosis**
Developer:	**Psygnosis**
Release Date:	**December**
Origin:	**France**

The 3D virtual world created by Infogram in *Alone In The Dark* opened up an entirely new way for developers to deliver gaming universes. Although it has been

imitated several times, no one seems to have gotten a better grasp on the artistic value of the genre as the development team working on the new *City of Lost Children*. Filled with rendered cut-scenes and smooth, believable interaction with a 3D world, the game promises to deliver a visual feast surpassing anything attempted before.

For those unfamiliar with the film, *The City of Lost Children* is the story of a little girl looking for her lost friends. Through her travels she encounters many bizarre and

twisted personalities, some of whom are helpful, and some who are diabolically harmful.

Luckily, *The City of Lost Children* is interesting in its approach to gaming as well. Unlike many games that put the player into the shoes of a gun-toting maniac or brilliant private detective, *City* casts players as a relatively helpless little girl. Situations that would seem comical to a more physically endowed character are moments of intense danger for this small child. The resulting gameplay offers a terrifically novel approach that makes *City* a game well worth looking forward to.

ng

The original was *almost* a classic. Now Reflections aims to go all the way

Destruction
Destruction Derby 2

Format:	**PlayStation**
Publisher:	**Psygnosis**
Developer:	**Reflections**
Release Date:	**November**
Origin:	**U.K.**

As a demonstration of PlayStation's graphic power, *Destruction Derby* stood alone in 1995. Gameplay let the visuals down, however, with the realistic handling of the cars proving to be unsatisfactory to gamers accustomed to such OTT arcade thrills as *Ridge Racer* and *Daytona*. Now Reflections has the chance to correct these mistakes with *Destruction Derby 2*. Next Generation met with Martin Edmondson, project leader:

NG: How far are you into the game's development right now?

Martin: We're approximately six months complete. At the moment each programmer is working on a particular aspect of the game (car intelligence, car handling, and so on) to be pieced together later.

NG: From a technological point of view, to what extent have you built on the original *DD* engine?

Martin: The game now handles collisions in 3D. That is, cars are able to roll, tumble, and cartwheel in real time, making the crashes far more dramatic. Using the knowledge gained with *DD1*, we have rewritten and improved the speed of the main 3D polygon engine, which has freed more time for the vastly more complicated collision calculations.

We have also made more use of some of PlayStation's hardware features such as Gouraud-shaded lighting, transparency, and so on. We have also greatly improved our development tools so time-consuming and mundane tasks such as arranging textures and model conversion are quicker.

NG: Do you find that PlayStation still has more to discover, or are you hitting the ceiling of its power?

Martin: I think that it may be quite some time before the level of frustration is reached. During and since the development of *DD1* we discovered plenty of new techniques for improving performance and this will undoubtedly continue.

NG: To what extent is this a real sequel, and not simply the same game repackaged?

Martin: From a programming point of view, *DD2* has been re-written virtually from scratch.

However, the most essential fun elements of *DD1* have been retained and improved, namely the

crashes. The game was always meant to be fun and not taken too seriously, though *DD2* should feel more weighty and have a longer life span.

NG: Can you tell us about *Monster Trucks*, your other PlayStation title? Is it based on the *DD* engine?

Martin: No code is shared between *DD2* and *Monster Trucks* (with the exception of surrounding code such as sound and sprite routines, etc.)

Monster Trucks started development about three quarters through *DD1* and is a game based on those famous car-crushing, monster pick-up trucks with the oversized wheels.

The player is able to race through water, jump over huge mounds of earth, crush cars, etc. Basically, the game accurately models vehicles' suspension over rough terrain.

All the high speed collisions and physically-accurate crash mechanics that made the original such a hit will return in *DD2*

Wipeout 2

1995's *Wipeout* is considered by many as PlayStation's finest hour. So how can the sequel be made even better?

Format:	**PlayStation**
Publisher:	**Psygnosis**
Developer:	**Psygnosis**
Release Date:	**November**
Origin:	**U.K.**

Psygnosis is working on new craft to introduce to the *Wipeout* universe. The aim is to be more beginner friendly, while at the same time offering advanced players more depth and strategy

The first true multimedia game? *Wipeout* blended professional music, professional graphic design and — get this — a good game

Although lacking the arcade-appeal of *Ridge Racer*, it was perhaps *Wipeout* — more than any other game — that was PlayStation's finest answer to the awesome *Sega Rally* on Saturn. Certainly inspired by Nintendo's *F-Zero*, the ground-breaking Super NES game, *Wipeout* managed to integrate state-of-the-art visuals with great back-to-basics gameplay.

Next Generation talked with Andy Satterthwaite, *Wipeout 2*'s producer, to find out how the sequel will improve on the original:

NG: How far are you into the game's development right now?
Andy: We are at 35%.
NG: To what extent is it fair to describe *Wipeout 2* as a "second-generation" PlayStation title?
Andy: Obviously, our previous experience will help us avoid many of the pitfalls of PlayStation development, allowing more of the development time to be spent on innovative coding and development and polishing the ever important issue of gameplay, rather than on nongame-related problem solving.
NG: To what extent have you improved on the *Wipeout* engine?

Andy: We've completely overhauled the collision code and AI, which means that we have been able to increase the maximum race speed while also improving the resolution of the collision detection.

We've also employed some innovative graphic effects, which we believe will make *Wipeout 2* the most visually striking race game available on PlayStation. We've also drastically reduced the track loading times and menu accesses.
NG: What design elements or aspects of gameplay structure have been changed to make *Wipeout 2* an improvement over the original?
Andy: The race structure has been drastically changed to one with a greater arcade feel. There are now more ships on track, more race classes, entirely new tracks, new weapons, checkpoints, and pit lanes.
NG: Have you acted on any criticism of the original?
Andy: A few people thought the original *Wipeout* was hard to get into, so this time we're making things easier for the novice by introducing a slightly simpler and slower introductory race class.

On the other end of the scale, however, we've introduced speeds and features which should provide the experienced player with even greater challenges.

NG: How much unexplored potential do you think PlayStation has still to offer?
Andy: The PlayStation has a lot of hidden depth not immediately apparent to the initial developer — we are just beginning to tap these hidden depths for *Wipeout 2*.
NG: How important were the music and stylized intro graphics to the original game's success? To what extent will these elements evolve in the *Wipeout 2*?
Andy: These elements were integral to the overall design philosophy of the game. With *Wipeout 2*, we are maintaining our links with the Designers Republic and acquiring music from Professional bands and DJs as well.

> "We've completely overhauled the collision code and AI, which means that we have been able to increase the maximum race speed"
>
> **Andy Satterthwaite, Psygnosis**

ng

Zombie**ville**

B-movie horror meets the graphic adventure game in a game that Psygnosis hopes will horrify PC gamers

Zombies and other nonplayer characters move in 3D around prerendered backgrounds. Try not to get bitten by one: you know the score...

Format:	**PC**
Publisher:	**Psygnosis**
Developer:	**Psygnosis**
Release Date:	**September**
Origin:	**U.K.**

Players take on the role of a young adventurer who has been infected with a disease that is slowly turning them into a zombie hungry for human flesh. As they travel around a small town and its outskirts, players will encounter others who have also contracted the sickness, some who have not yet fallen prey to it, and some who are already the walking dead.

More than just another pick-up-the-weapon-and-start-shooting blast-fest, *Zombieville* uses detailed nonplayer character templates and moral-based puzzles to encourage players to think twice

about running through town trying out their arsenal on everything that moves. Players who kill innocent characters will not only find themselves unable to acquire valuable information, but also will find that their evil nature is increasing the speed at which the disease spreads through them.

Psygnosis is banking on *Zombieville*'s B-movie appeal and its tried 'n' trusted gameplay structure to win over gamers come its release later this summer.

The game features no onscreen status data, so es to be more spooky

ng

Europe's most popular sport heads for US gamers

Power **Soccer**

Format:	**PlayStation**
Publisher:	**Psygnosis**
Developer:	**Psygnosis**
Release Date:	**May**
Origin:	**France**

Since Electronic Arts dropped the ball with its move into the 32-bit sports market, there is no longer a dominant power in the business of turning sports into videogames. Unsurprisingly, many companies have sought to fill the vacuum.

This is Psygnosis' first attempt. Complete with flawless graphics, sound, and gameplay, the game's French development team has done an amazing job of recreating the excitement and challenge of the world's most popular sport.

Like in *FIFA*, players can tackle (no pun intended) the game from several different camera angles and positions. Full stats are

included for every one of the teams, and standard substitutions are allowed. Play is fast and furious, intuitive enough in control to enable beginning players to grab the joypad and start playing, but detailed enough to give skilled players a definite advantage. Like a fighting game, *Power Soccer* also includes "special moves" that give players terrific effects like bicycle kicks and power moves when they press the appropriate button combination. These moves have

different results depending on which of the two modes (arcade or realistic) that the player is in, with arcade moves showing brilliant flashes behind the ball which can carry enough force to push the goalkeeper back into the goal on a solid power shot.

With its phenomenal polygon graphics, multiple move control set, and realistic feel, *Power Soccer* is poised to grab another piece of the now fragmented next-generation sports crown. This is one that every sports fan will want to watch for.

It looks good, but can Psygnosis' French entry compete with *FIFA*?

ng

JUST BECAUSE YOU HAVE TO GO TO YOUR ROOM
DOESN'T MEAN YOU HAVE TO STAY THERE.

INTRODUCING THE PERFECT REASON TO GET THE PARENTAL UNITS TO BANISH YOU FROM THE LIVING ROOM. VIRTUAL i-glasses! VTV™ TURN ANY ROOM IN YOUR HOUSE INTO A VIRTUAL PLAYDEN FOR YOUR FAVORITE VIDEO GAMES. JUST PLUG THE VIRTUAL i-glasses! INTO YOUR SYSTEM (SONY™, SEGA™, NINTENDO™, 3DO™) AND LOSE YOUR HEAD IN A VIDEO GAMING EXPERIENCE LIKE NEVER BEFORE POSSIBLE. COMPLETE WITH VIVID FULL-COLOR IMAGERY ON A VIRTUAL BIG SCREEN AND FULL BLOWN STEREO SOUND. TOTAL PRIVACY. TOTAL INTENSITY. TOTAL GAMING. SO, WHAT ARE YA WAITING FOR? GO TO YOUR ROOM!

i·glasses!
YOU HAVEN'T SEEN THIS BEFORE™

ONE CHANCE.

"A Solid multi-player game fest."
--Computer Gaming World

"Multi-player, city building, land exploring, alien busting fun."
--Strategy Plus

"Absorbing gameplay...the best visuals and sound effects that today's technology offers."
--Next Generation

For Windows 95 and Windows 3.1 CD-ROM

ACCOLADE

NHL PowerPlay '96

The first 3D, polygonal hockey game
hits the next-generation consoles with
all the makings of a sports classic

Format:	**PC, Saturn, PlayStation**
Publisher:	**Virgin**
Developer:	**Virgin**
Release Date:	**June**
Origin:	**U.S.**

Real players and real stats keep the game realistic and exciting

Dahlquist

Ice marks, realistic jerseys, and fantastic crowd effects are small details, but add a lot to the overall game

Secco

Sheppard

The overhead view enables you to take in all the action just like on television

I n the early days of the 16-bit sports war, the real winner was Electronic Arts, which maintained a virtual monopoly on all powerhouse titles for both systems. With the evolution of next-generation games, the doors once again are open for companies to claim what is now recognized as one of the most important crowns in the game industry, that of sports king. With its newest title, *NHL Powerplay '96*, Virgin is adding itself to the ranks of companies which are flexing their muscle inside the sports arena.

One of the greatest assets of *Powerplay '96* is its fantastic visual impact. The game creates a 3D environment that is not only good-looking, but also scrolls and pans with enough speed to present a fluid and controllable play atmosphere. On the PlayStation and Saturn versions, players can move a virtual camera to any point on the rink to for their choice of view.

Excellent attention to detail is apparent in the actual play of the game. Virgin prioritizes solid game AI, enabling the game to react to different play situations like human players and coaches would. Full NHL and NHLPA licenses with complete stats add to the

game realism as well. The game's "coach" mode enables players to edit standings for line changes, and both offensive and defensive play styles and zone coverage.

Although it's too soon to tell if *Powerplay* will be the best of the first-year hockey sims, the potential is there. And now, gamers have the chance to see what solid 32-bit gameplay is all about — the smart orchestration of great graphics, sound, and effects alongside fantastic AI routines.

ng

Devil Summoner

Even if there were more RPGs for next-gen systems, Atlus' latest would be noticed for its use of the CD-ROM form

Using both first-person and third person perspectives, Devil Summoner blends new technology with traditional RPG elements

Setting this RPG in a modern city gives the player access to modern guns

Format:	**Saturn**
Publisher:	**Atlus**
Developer:	**Atlus**
Release Date:	**summer**
Origin:	**Japan**

Not every monster and demon immediately attacks you; it's possible to talk them down, if you're fearless (and lucky) enough

Later in the game, monsters can morph together to build even bigger, badder beasts

Released with a barrage of critical praise and impressive sales in Japan, *Devil Summoner* (a.k.a. *Shin Megami Tensai*), may be the next landmark among next-generation RPGs. In modern Tokyo, a student comes across the body of a "Devil Summoner," a kind of supernatural private detective, who's soul was torn out and banished to limbo during a battle with the forces of evil. With no warning, the Summoner steals the student's soul, and asks him to carry on the investigation in the Summoner's stead, agreeing to return him to his own body when the case is solved.

Some deal, huh? From such modest beginnings, however, is built one of the most complex and diverse RPGs yet devised. The game uses a first-person perspective for walking around Tokyo,

then switches to more traditional third-person perspectives for encounters between characters. Also, while the game has a supernatural storyline, setting the game in a modern city gives the player access to modern guns — and nothing stops the forces of evil like a load of buckshot to the head.

Even more interesting is the designer's approach to encounters with monsters. Although there's every chance they may simply attack you, depending on how powerful the player has become and how well they handle the encounter, a monster may also give information or items, or join you. Further, monsters can be morphed together in various combinations to form new creatures with additional abilities, and there are more than 200 possible combinations to try.

It can be argued that the RPG is a genre whose appeal depends on the variety of situations it can put players through, and on the sheer volume of information it gives them to juggle, making it a natural for the storage room of CD-ROMs. *Devil Summoner* is among the first games to try.
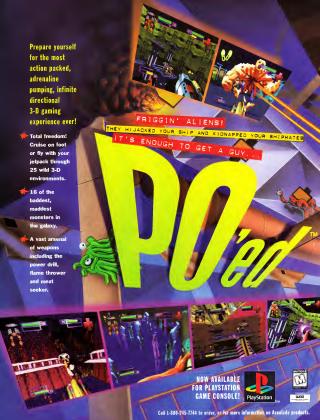
Hey, went to bag a demon? How about buying an AK-47, or maybe a French SPAS?

ng

"YIPPIE-KI-YAY ✳%@#?£!"

DIE
TRILOGY
HARD

COMING IN MAY.

WINDOWS 95™ CD-ROM, SONY PLAYSTATION™, SEGA SATURN™

Capcom

Format:	**Multiconsole**
Publisher:	**Capcom**
Developer:	**Capcom**
Release Date:	**N/A**
Origin:	**Japan**

After a period of relative dormancy, Capcom's legendary status as a creator of classic arcade games has been restored and is growing again

Super Street Fighter II Turbo (top), **Dark Stalkers** (far right), Akio Sakai, head of Capcom consumer software division (middle)

For a company with such a revered arcade and console lineage, Capcom hasn't had it easy of late. While a history of rich, playable arcade games precedes it, the Osaka-based company has recently been suffering from the familiar Japanese problem — how to adapt. Negotiating the gargantuan rift that exists between 2D and 3D worlds clearly hasn't been an easy process for Capcom.

Recently however, it seems as if the company is pulling out of its period of redundancy. With a glut of arcade ports currently in the offing for PlayStation and Saturn, plus its most aspiring offering, the eery, gore-fest *Resident Evil*, the company is showing it's ability to overcome any perceived drawbacks. *Next Generation* attended the company's consumer headquarters in Tokyo to speak with the head of the consumer software division, Akio Sakai.

NG: [unclear]

AS: Any games have the possibility to be criticized so it is necessary for game companies to control and limit violence themselves. The blood and gore in *Resident Evil* does make the game more dynamic, but it also causes a lot of problems... which is difficult to comment on. *Mortal Kombat* is very popular, so why shouldn't

we put any violent scenes in our games? Ultimately though, we have to regulate violence in games. We'll receive a lot of criticism if we don't.

NG: [unclear]

AS: Although we have a studio for motion capture, we didn't use it in that game. Instead, the coders studied books, videos and films to learn the movements of spiders and people, etc. [Incidentally, one Capcom artist allegedly scanned in a picture of a dead person's eyes to capture the moribund look on the Zombie's faces]. We're more likely to use motion capture in head-to-head fighting games. For example, we employed it in parts of *Street Fighter: the Movie*. That was the first of our games which exploited the technique, although we'll be using it more from now on — it's much quicker.

The latest in Capcom's vertical shoot 'em up stable is 19XX, soon to be converted to PlayStation

NG: [unclear]

> **"Ultimately, we have to regulate violence in games as much as possible"**
>
> **Akio Sakai,** head of consumer software division

NG: [unreadable]

AS: Way back in the NES days, we developed a role-playing game called *Sweet Home*, and it's from there where our inspiration comes.

NG: [unreadable]

AS: We are aiming this game at 18 year olds in Japan, a higher age than Capcom usually aims at, and an entirely different audience. This is partly because PlayStation is supported by older people. We also want as big a market as possible for our games. If we create a game for a low age group, there is little chance that interest in the title will spread to more mature players. However, if the game is aimed originally at that higher age, there is a good chance the interest will filter downward.

NG: [unreadable]

AS: We are considering a Saturn conversion but the machine's spec is not ideally suited. Technically speaking, it'll take us a long time to transplant the game. We'll come to a conclusion about that soon. Because Saturn is popular in the arcades, we guess its users are younger than PlayStation owners.

NG: [unreadable]

AS: It takes a year to convert perfectly. With *X-Men* we had to cut about a third of the animation frames due to Saturn's smaller RAM capacity.

NG: [unreadable]

AS: No way — if we develop new 3D fighting games we will probably develop new 3D characters. It may well become possible to produce a 3D Ken or Ryu if we can use a great deal of polygons on them but squarish shapes would spoil their present images. In our new game, *Street Fighter the Movie*, you'll see Ken and Ryu, but a 3D version won't be realized until we can use fewer polygons and the next-gen machines' prices drop.

NG: [unreadable]

AS: Because we remained committed to the Super Famicom, which can't handle 3D, Sega and Namco got a headstart on us in the arcades. But now we will be

Akio Sakai, head of Capcom's consumer software division, wants the *Street Fighter* company to become as celebrated in 3D as Sega and Namco are presently

concentrating on 3D for both home users and arcade fans. We hope to eventually compete with Sega and Namco, but with 3D arcade machines that are cheaper to make than their's. We won't be abandoning our popular 2D-animated style seen in *Dark Stalkers* and *X-Men*. We think of this type of 2D game as our own.

NG: [unreadable]

AS: Generally, we've developed most of our 3D stuff with Softimage and SGI tools. Our programmers had a hard time in the beginning — it was like changing from CISC to RISC programming. We also spent a lot of time remaking and converting the software provided by Sony to general software. But we're getting used to it all now. In fact, it's quicker than developing 2D games now.

NG: [unreadable]

AS: Compared to Namco's System 11

> "It may well become possible to produce a 3D Ken or Ryu if we can use a great deal of polygons"
>
> Akio Sakai, head of consumer software division

Dark Stalkers characters (top to bottom): Morrigan, Sasquatch, and Felicie

Capcom's newest zombiefest, *Resident Evil* combines *Alone in the Dark* gameplay with lots of blood and guts

Saturn *Vampire Hunter* (the follow-up to *Dark Stalkers*) continues Capcom's trend for lavish, cartoon-style graphics and classic 2D fighting gameplay

The new *Street Fighters* (clockwise left to right): Gen, Rolento, & Sakura

Bionic Commandos (aka *Top Secret*), *Commando* (middle) and *Gunsmoke* (right) — all Capcom eighties classics

Street Fighter Alpha II

The *Street Fighter* series has now reached a grand total of nine titles with Capcom's release of *Street Fighter Alpha II*.

Using the CPS 2 board, which generated the likes of *X-Men: Children of the Atom*, *Street Fighter Alpha*, and others, *SFAII* adds just enough in just the right places to justify its "new" existence. All 13 characters in *SFA* will return (plus eight more), plus three new ones: Sakura, Gen, and Rolento. New features include a combo system you can create during play, and at least one of the characters is capable of two different fighting styles (Gen switches from Mantis to Crane style by pressing three buttons simultaneously). The game also is set in turbo mode, providing hyper-quick movement and fighting action.

It's still 2D, and it's more rehash *Street Fighter*, but *SFAII* will feed the gameplaying sharks just long enough for it to be old news when *SF3* comes out this summer.

board, the spec and functions are generally the same.

NG: Why has Tecmo limited its Saturn development thus far?

AS: We've actually started developing some new arcade titles. *Tashinden* isn't one of our own in-house games, but we're in the process of developing our own games and not just beat 'em ups, either.

NG: Do you believe that people will want machines like Saturn versions around the world as in *Tashinden 2* in the greater?

AS: Those who don't have the PlayStation version will be keen to play the arcade version, which also has a few unique features. For example, it's possible to fight against a lot of other players in the arcade.

NG: Will you be developing for Nintendo's Ultra 64?

AS: Yes, of course. We will develop games on Nintendo 64 which take into consideration Nintendo's present market, i.e. children. However, that does not rule out the possibility of converting games like *X-Men* and *Resident Evil*. The machine hasn't been released yet so we don't know which age group Nintendo is targeting, but we are developing some completely original concepts for Ultra 64 at the moment.

AS: We produced a few titles for the PC98 and Sharp X68000, but they only sold about 5,000 copies each. But we do expect the Pentium, and particularly Windows 95, to catch on all over the world, and Japan as well. So we will develop more games for the '96 PC market. We're already converting *Resident Evil* and, unlike PlayStation, we'll use red blood.

NG: Are there any future plans to convert your strong line up of arcade classics?

AS: Our development team has refused to do so because other companies have already written conversions. But, it will be a successful idea if we put three or four games on one CD and then sell it at a reasonable price. We're sure Namco will be doing it with *Museum CD*. Now, if only you could convince our R&D department ...

Time **Gate**

When William Tibbs, the hero of the game, first slips through the time gate he experiences some traditionally warm medieval hospitality

The game's panning camera always finds the best perspective from which to view the action. In this sense, *Time Gate* is highly cinematic in look

Format:	**PC CD-ROM**
Publisher:	**Infogrames**
Developer:	**Infogrames**
Release Date:	**TBA**
Origin:	**France**

The catchily entitled "Museum of the History and Traditions of the Middle Ages" is where most of the action takes place

When Infogrames released its seminal *Alone In The Dark*, the French company basically redefined the concept of the arcade adventure. *Time Gate*, the company's newest title, is the first part in a brand new series of three adventures employing a totally new scenario.

Technically, *Time Gate* is designed in much the same style as *Alone In The Dark*: the player controls the main character around a 3D environment with which he can fully interact (i.e. objects can be picked up, enemies can be fought, etc.). The difference now is

that the scenery is much more sumptuously detailed and the character animation greatly improved. Infogrames claims there will be more than 250 locations and 40 characters in the final version, with each character using more than 1,000 frames of animation. These graphic improvements have been made possible by a 3D mapper, developed in-house, and used to model and Gouraud shade all characters and objects.

If this graphic quality is maintained throughout the game and backed up by a similar standard of puzzles and action sequences, this title should see Infogrames reasserting its status as one of the leading designers of arcade adventures. ng

The game begins with William being informed of his destiny and his link to the Knights of the Templar. There may have been more subtle ways of doing this than slinging an axe through his newspaper, though

Infogrames claims there will be more than 250 locations and 40 characters in the final version

ng alphas

Time Commando

Adeline's latest title blends rendered 3D scenery with roaming beat 'em up action — but at what cost to gameplay?

Format:	PC CD-ROM
Publisher:	Electronic Arts
Developer:	Adeline
Release Date:	June
Origin:	France

The prerendered intro is stylish and intense — typical of French design

If America has gloss, Japan has playability, Germany has technical wizardry, but then the French have style. Of all the French games ever created (of which, admittedly, there are few), each is guaranteed to be graphically ahead of its day. *Time Commando* is no exception.

Coming from Gallic coders Adeline, the designers behind the revolutionary *Relentless*, *Time Commando* displays a graphic quality that puts most other PC titles to shame. The scenery is a fully rendered, texture-mapped, hi-res (i.e. 640x480) landscape streamed off CD, which rotates and pans as the player wanders around. Unlike most streamed games, though, *TC*

After warping to the prehistoric era, the time commando has to tackle Neanderthals (top), saber-toothed tigers (left), and pendulums (right)

Time Commando's weaponry advances according to the time zone you're character is in. In medieval times, you can use swords and crossbows

staggers the linearity. Depending on where the player wanders the appropriate background image is accessed and displayed, with the 3D characters placed on top. Unlike Sega's *Virtua Cop*, which pulls the player through the game relentlessly, some freedom of control is provided to the player — this is not a game on rails.

The combination of freedom to explore and Gallic design

Time Commando's Wild West level has a distinctly Sergio Leone, spaghetti-western feel, with harsh red sands, rickety wooden buildings, and hombres dozing in the sun

makes it inevitable, therefore, that a bizarre plot should propel the action. In the future, computers have advanced so that the only thing limiting their awesome power is the speed in which light travels around the circuitry. To surpass this, computers are built with their cores placed within another dimension, where light travels faster. Surprise, surprise, this bit of hardware trickery malfunctions, triggering a chain reaction that could potentially destroy all life. To save the planet, the time commando is thrust into this temporal displacement, sending him through 10 time zones to shut down the computer's core before it blows.

In this way, Adeline has introduced era-sensitive weaponry to the basic beat 'em up engine. In the prehistoric land, clubs and rocks can be collected, in medieval Europe, the weapons are crossbows and swords. Whether this variety will raise *Time Commando* to a class above beat 'em up, however, remains to be seen. In this very early stage of development, all Adeline has to

offer is an incredible realtime animation engine bolted onto some basic gameplay, reminiscent of System 8's classic, *The Last Ninja*, on Commodore 64. But if Adeline can blend *TC's* graphics and gameplay successfully, it could well uphold its reputation for mold-breaking software. ng

In the samurai level you encounter by ninjas and experts in martial arts. Note that the background graphics actually rotate and scroll as the time commando searches for the computer processor — the key to the game

Tomb Raider

U.S. Gold and Core bring us an adventure with the strongest polygon female ever to hit the game industry

Format:	**Saturn**
Publisher:	**U.S. Gold**
Developer:	**Core**
Release Date:	**winter**
Origin:	**U.S.**

Game, guns, and even bigger guns are Lara's primary meane of communication

Lara Croft is no kidnaped girlfriend, she's a two-fisted hero who's more than able to save the world by herself — and then some

Tomb Raider shows a great deal of promise, crossing the polygon characters of Capcom's *Resident Evil* with the fast-paced gameplay of *Doom*

Recently, gaming has seen an upsurge of the role of female characters. They've changed from meek princesses in need of rescuing to *Rambo*-esque, center stage heroines. *Tomb Raider* has taken this to the extreme, giving us not only a heroine, Lara Croft, who's even more hard-bitten and surging with testosterone (metaphorically speaking, of course) than any Indiana Jones or James Bond could ever hope to aspire to, but also an especially vicious and nasty female villain.

Lara is fresh from a hunting trip in the Himalayas where, having bagged a 12-foot tall yeti, she's itching for a new challenge. In a scene which pays homage to one of the game's obvious inspirations, the original *Raiders of the Lost Ark*, she meets with Jacqueline Natla in a seedy dive bar in Tibet. There Natla convinces her to recover a mysterious artifact from the tomb of

Qualopec in Peru. The artifact is, in fact, one of three pieces of the ancient Atlantean Scion, a talisman of incredible power. After discovering the fragment, Lara falls victim to Natla's treachery, but overcomes the hired muscle sent after her.

As she delves into the reasons why Natla would double cross her, she uncovers a mystery that reaches back to

Wolves, hired mercenaries, Atlantean bio-robots, and even the abominable snowman are no match for Lara's firepower

before the dawn of recorded time, to the treachery that destroyed the Atlantean civilization and the disasters that struck the world when it fell. In the course of the game Lara is betrayed again, shot at, attacked by wolves and thugs, and does battle with still very active and alive Atlantean bio-robots. Fortunately, she carries and uses more and bigger guns than anyone else in sight.

The publisher, U.S. Gold, has tried to describe the gameplay in the "like-*Doom*-except" category, but it's clear the game is only going to resemble *Doom* in terms of its pace and violence. *Tomb Raider* uses 3D polygon characters, and Lara is free to move around the game area, blasting at whatever gets in her way. At its heart, the game is a graphic adventure, played through action sequences, since the storyline is quite sprawling, and clues must be uncovered to continue to the next stage.

At press time, only an alpha-stage demo was on view, showing Lara squaring off against a pack of wolves. Other elements, including the FMV sequences that link together the game stages, had yet to be finalized. However, *Tomb Raider* shows a great deal of promise, crossing the polygon characters

of Capcom's *Resident Evil* with the fast-paced gameplay of *Doom* — a combination few other coming titles can match. Throw in a hard-bitten female hero, and you've got a game with all the elements of a possible hit. **ng**

Tomb Raider uses polygon-modeled characters in the style of *Resident Evil*, but leaves the action more free-form

The game's settings include the Jungles of Peru and Cambodia, and the deep Egyptian desert, as Lara races her arch-nemesis, Jacqueline Natla, to find the three pieces of the ancient Atlantean Scion

Lara is free to move around the game area, blasting at whatever gets in her way

While play control and the exact moves and attacks Lara will be capable of has yet to be finalized, the motion-captured animation promises to be among the smoothest yet seen

Eurit

The PlayStation's main forte up until now has been graphics, but *Eurit* shows that gameplay is just as important as it was during the 16-bit era

Though it may sound strange, *Eurit*'s neo-tag format delivers excellent gameplay. Traps, spells, monsters and others will keep gamers riveted

Format:	**Saturn, PC, PlayStation**
Publisher:	**Virgin**
Developer:	**Radical**
Release Date:	**summer**
Origin:	**Canada**

Enemies are both unusual and varied, forcing players to develop new strategies for each upcoming level

Keeping up with the action of your competition is of the utmost importance

Virgin's *Eurit* is a bit of a surprise. Since the release of PlayStation, many companies have been in a rush to show off the level of graphics and sound programming they've achieved on the new machine in established genres. Careful companies have not been looking for great new games as much as they've been looking for attractive-looking games. If *Bomberman* and *Tetris* were shown to publishers today, there's a good chance they would be pushed aside in favor of games with more visual bells and whistles.

Like *Bomberman*, *Eurit* is one of those titles that is very simple on its surface, but is a great deal more once you plumb its depths. Basically, the game is an electronic cross between capture the flag and tag. Each player (two in the basic game, four with the PlayStation link or PC network) must navigate his or her way around a maze in the attempt to capture a set of flags to win the game. One player starts the game as "it" (like in tag) and cannot capture any flags until he's touched the

other player and made them "it." In addition to the back-and-forth chase, the maze is filled with all sorts of dangerous obstacles and monsters as well as several traps, teleports, and powerups that keep the gameplay fresh and varied. Magic spells, which enable players to step off the maze by building platforms (and blasting other players with disorienting effects), are included. Currently, the game contains 48 levels (three levels on 16 planet types), 16 bonus levels, and 16 monster types.

While graphics powerhouses come and go, it's titles like *Eurit* that focus on gameplay that have the potential to deliver long-term play to fans.

***Eurit* is an electronic cross between capture the flag and tag**

3DO Games:

Decathlon

After a string of successful titles, Studio 3DO tries to break the sports barrier in time for the games in Atlanta

Format:	**3DO**
Publisher:	**Studio 3DO**
Developer:	**Studio 3DO**
Release Date:	**May**
Origin:	**U.S.**

All 10 events of the Olympic Decathlon are represented, and all use motion-captured and texture-mapped athletes

No Olympic games should be without the javelin event either

Athletes have a wide range of optional attributes, enabling you to customize your competitor for any race and nationality

The final 1,500 meter run should prove to be a real button-pushing marathon — an endurance event for the chair-bound athlete

S tudio 3DO has already taken a shot at a pseudo-sports game, *BattleSport*, with smashing success. Now it's trying its hands at a genuine sports title. As the name implies, *3DO Decathlon* covers all 10 events of the Olympic decathlon, from the 100-meter dash, to the long jump, pole vault, javelin throw, and the final 1,500-meter run.

Players can choose their athlete from among 25 nationalities, including options for hair and skin color. Every competitor has attributes for physical characteristics like speed, strength, and stamina, which can be improved by training before the events. Players need to be careful not to overtrain though, since every athlete has a set of injury statistics as well. The onscreen characters are completely motion captured from real world-class athletes, and care has been taken to make each one move accurately according to real-world human bio-mechanics and physics of motion. Play control is handled through a combination of button and joypad, using the traditional method of punching a button at the correct speed and, perhaps more important, rhythm to make the

onscreen character accelerate smoothly.

Up to eight players can compete at once, using either one controller and taking turns or multiple controllers simultaneously, and may choose to either run the full decathlon or enter "Track Meet" mode to compete in a specific series of events. Players view the action from a floating camera that pans and zooms to follow the athlete, and the screen is overlaid with TV-style graphics to give the feel of watching a real Olympic broadcast, right up to the award ceremonies.

Studio 3DO has produced a number of excellent titles in recent months, and there's no reason to believe *Decathlon* will be any exception.

Each character moves accurately according to real-world human bio-mechanics and physics of motion

Psy-Q
The industry leader
in games console development systems

OFFERS SOFTWARE DEVELOPERS More choice =
More target systems =
More host environments = **MORE POWER**

PSY-Q DEVELOPMENT SYSTEMS SETTING THE STANDARDS OTHERS FOLLOW

A bold statement, but one
Psy-Q Development Systems have made

reality

PC Compatible or our Silicon Graphics Indigo or Indy 2 host environments within Windows 95™, DOS or X-Windows for PlayStation and Saturn Super-Consoles.

Custom CD Rom emulation hardware - New Standalone Generic CD Emulators or target specific CD emulation for both PlayStation & Saturn.

Practically NO LIMIT on the size of your project, handle multi-megabyte symbol files and hundreds of source files with ease - You'll never have to worry about your development system running out of steam halfway through your next chart busting sensation.
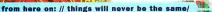
WINDOWS 95™ / X-WINDOWS DEBUGGERS - ORGANISE your workspace using any number of overlapping views and split non-overlapping panes, pop-up menus, keyboard short-cuts, tool buttons, fully customisable look-and-feel including colour schemes, fonts and layouts, plus a total project information utility which remembers your layout preferences and system state plus much, much more.

If that wasn't enough now you can eradicate the hassle of actually setting your system up as Psy-Q systems are now available PRE-ASSEMBLED and supplied with high specification PC's or Silicon Graphics workstations.

Further information contact:
Psy-Q Sales
Psygnosis Limited
Napier Court
Wavertree Technology Park
Liverpool L13 1HD England

tel: +44 (0)151 282 3000
fax: +44 (0)151 282 3300
email: psyq@psygnosis.co.uk

development
:systems:

from here on: // things will never be the same/

Check SN Systems' web site at
http://www.snsys.com

Magic Knight
Rayearth

Working Designs imports another very Japanese RPG and develops it into something uniquely American

Rayearth's animated sequences are a combination of original work and scenes from the anime TV series

Format:	Saturn
Publisher:	Working Designs
Developer:	Working Designs
Release Date:	July
Origin:	Japan

Each of the game's three major characters has her own unique powers, and switching from one to another then is integral to the game's structure

W orking Designs has made a name for itself by importing RPGs from Japan and not only translating them, but reworking them so the dialog has a distinctly American feel, and spicing it with Western pop-culture references. Now the company is making the leap to next-generation systems in a big way, having released *Shining Wisdom*, the war sim *Iron Storm*, and with barely a pause, *Magic Knight Rayearth*, all for Sega Saturn.

Based on a Japanese animated series, this RPG follows the adventures of three girls, students in modern Tokyo (at press time, the characters names had yet to be finalized, since Working Designs is "Americanizing" them). The three are mysteriously transported to the mythical world of Rayearth. Somehow in this land they all possess mystical powers, which makes them the only ones capable of opposing the evil that is spreading through the land and (ahem) rescuing the princess and restoring peace to the kingdom.

Throughout the course of the game, the player can switch between controlling any of the three major characters at any time. As with previous Working Designs releases, the oddly named title includes a large number of animated sequences and more than 90 minutes of CD-supplied music and spoken dialog, including plenty of Working Designs signature humor. While *Rayearth* uses the typical top-down RPG perspective, full use has been made of Saturn's 24-bit color palette, which yields extremely colorful and detailed backgrounds.

Although all Working Designs' previous releases had been for Sega's never popular and now defunct Sega CD, the *Lunar* series still sold well. Legions of RPG fans should have a lot to look forward to.

Three little schoolgirls have been turned into superdeformed heroes; it's refreshing to have female heroines

ng

You blasted your way
through an onslaught of
undead marines and

hell-spawned hordes in
Doom, Ultimate Doom and

Doom II. Now you can
retire, right? Wrong.

Seems flesh-eating mutants
have the mortality rate
of a cockroach and are
alive and kicking in Final
Doom—the last of the
legendary Doom products.
It's two new 32-level
episodes complete with

new stories (Evilution
& The Plutonia Experiment),
new frighteningly realistic
graphics and new pulse-
pounding music. It's time
to finish what you started.

5.56

OLD SOLDIERS NEVER **DIE,**

THEY JUST TURN INTO

BLOODTHIRSTY

MUTANT ZOMBIES.

FINAL
DOOM
End of story.

Red Baron II

Sierra On-Line's second crack at WWI adds a whole new look to one of the greatest flight simulators ever

New weaponry and views (top) can help you win the war, or send you down in flames (right)

Format:	**Windows 95**
Publisher:	**Sierra On-Line**
Developer:	**Dynamix**
Release Date:	**summer**
Origin:	**U.S.**

Full statistical info and period-accurate locations have been included

Although there are special ways to view the action, pilots will settle in with whatever engine best suits their style of play

Dynamix's original *Red Baron* was one of the greatest PC flight sims ever to hit the market. Smooth play, realistic graphics (for the period), and an unsurpassed campaign mode launched an entire line of top-notch war sims with the *ACES* series. Now, after *Aces over the Pacific* and *Aces over Europe*, Sierra is returning to the age of biplanes, aviator goggles, and long silk scarves with a sequel to the title that started it all. The question is, with a new operating system, and a tendency in the past to pay too much attention to the presentation rather than the substance of a game, will the development team be able to recapture the adrenaline-filled atmosphere of the original series?

So far, the project looks extremely promising. Sierra has been working on a superior AI system to replace the dated model used in the original *Red Baron*. In addition to including a random mission generator that ensures a fresh feel with each play of the game. This generator creates a circle of activity with a 150-mile radius that includes pre-existing conditions like dogfights in progress, enemy planes attacking your ground forces, friendly craft being attacked, and realistic war-front movement. The multiplayer mode will enable players to fly not only against each other, but also to select missions and fly as a team.

Along with an updated career mode, 35 planes to choose from, four different service branches, and texture-mapped graphics, *Red Baron II* just may have what it takes to deliver the same historical feel and new entertainment value of its predecessor.

Although knocking planes out of the sky is always fun, there is nothing so satisfying as laying waste to a ground target. Looks like dinner's overdone

ng alphas

An exclusive update from the developers to find out how Fox's epic is shaping up

Die Hard Trilogy

Format:	**Saturn, Win 95, PlayStation**
Publisher:	**Fox Interactive**
Developer:	**Probe**
Release Date:	**May**
Origin:	**U.K.**

Die Hard Trilogy is one of the spring's most anticipated releases — on all three major formats. Next Generation met with Simon Tick, the game's lead programmer, Probe Entertainment, in London to ask some questions:

NG: First, the PlayStation version. To what extent is Die Hard Trilogy utilizing all the hardware's graphical effects?

Simon: There are lots of things like lens flare, explosions, and that kind of stuff which relies quite heavily on the transparency effects of PlayStation. For the PC version, we can do the same effects, but in software. On Saturn, we're trying to support as many of the special effects as we can, but maybe we'll have to limit them a little bit. Like the lens flare, for example. At the moment on PlayStation, we've got six or seven circular images which appear to make the lens flare effect, but maybe we'll just have two or three on Saturn version to keep the frame rate up.

NG: So if you have to make a choice between detail and frame rate for the Saturn version, you keep frame rate. Right?

Simon: Frame rate is the main thing. We've got one guy coming over to us from Sega who's very clever. He's written a program which basically takes a polygonal model, and as it's rendering it looks at the size of the polygons; if they're very small it says "there's no point texturing this, let's do it flat in just one color," and this way it saves processor time and helps keep the frame rate up. We're going to reduce the detail of the models quite a lot, and reduce the texturing so the reads on Saturn will probably be flat shaded — so it's like a gray road rather then having textures.

NG: Are you saying that Saturn

can't match the power of PlayStation? Or is it just that you're devoting more time to getting the PlayStation version right?

Simon: It's because Saturn is not up to the job, really. What we've decided to do is lead on the PlayStation because currently it's the most powerful format there is.

What I've found before — while porting games from one 16-bit system to another — is that if you start designing on a Genesis, there are certain things you just don't think about doing — like mode seven stuff — because you think it can't be done. But if you give someone a Super NES game with mode seven in it to convert to Genesis, they'll do their damnedest to try and get it working on the weaker machine. So we figured that we'd do the best we possibly can on PlayStation and then give it to the Saturn guys. Then, programmers being programmers, they'll go "Oh I know what we can do," and then they'll find cunning ways to do it.

NG: You say Saturn is weak, but you must have been impressed with the Saturn versions of Sega Rally, Virtua Fighter 2, and Virtua Cop.

Simon: It was a pleasant surprise. Yeah we're impressed. But I think that if you took the code for Virtua Cop or Sega Rally and put it on PlayStation, it would be just as good. I don't think that Saturn is doing anything PlayStation can't do, it's just harder to do it.

NG: To what extent is the world in Die Hard Trilogy an accurate representation of Manhattan?

Simon: Since the film is set in New York, we wanted to be able to drive around New York. But when you're

going 200 miles an hour in your Ferrari — like you do in driving games — you can get from one end of Manhattan to the other very quickly. We were finding that with an accurate model of Manhattan, players would run out of space. So our levels are actually bigger than New York.

Also, the average speed in Manhattan is 11 miles an hour — but in the game, it's a lot faster.

NG: At one point the game didn't feature a grid system of streets — it was more of a racing circuit. Were you worried that having grid streets would affect gameplay?

Simon: We were concerned it could be a bit boring. But it's remarkable how well it does work because we mainly planned the bombs you have to chase diagonally from one another, and there are so many different routes you can take the first right, second left, whatever. That means no matter how many times you play the game you can always take a different route and you feel like you're in a real city.

Die Hard Trilogy may be the first game package to include three very different games — each of the three stages utilizes a totally different game engine

This person is:
a. Flying down a waterfall in the Amazon
b. Being shot at by terrorists in hovercrafts
c. Crashing into innocent tourists on a gondola
d. All of the above

RAW PURSUIT™
Coming Soon

DOS CD-ROM   SEGA SATURN   PlayStation   JVC
JVC MUSICAL INDUSTRIES INC.

Iron Rain

Format:	**Saturn**
Publisher:	**Game Arts**
Developer:	**Sega**
Release Date:	**fall**
Origin:	**Japan**

Assault 'mechs are now arriving in full force as Sega imports one of Japan's most high-profile titles to US shores

The game offers a wide range of terrain, and a variety of different mission goals

The weapons of choice in the 21st century are AWGS robots, the most recent and lethal are known as High-Macs

If the heads-up display of the typical High-Mec AWGS looks complicated, don't worry — mostly you just point and shoot

In the 21st century, when you say, "I'd kill for a chili dog," you mean it

The giant assault 'mech genre has never been as popular in the US as it has been in Japan, the home of *Mobile Suit Gundam*, but over the last year it seems to be making some headway. Now Sega is importing *Iron Rain* from Game Arts of Japan, adding to a list that includes *Mechwarrior 2* for PC, and *Krazy Ivan* for PlayStation.

The game is set early in the 21st century, and over-pollution has decimated the planet's ecosystem. The world is divided into four major powers, and the weapons of choice in the 21st century are AWGS robots (Armored Walking Gun System, an acronym which may change when the game is brought to US shores).

The most recent and lethal variety of AWGS are known as High-Macs, and *Iron Rain* consists of a series of engagements between the Asian and Pacific Community and Europe. The prize? Nothing less than control over what food the Earth can still provide.

Iron Rain **is a** realtime assault 'mech sim, seen mostly from a first-person perspective. The player is given a selection of at least five, and when the specs are finalized, perhaps as many as six different AWGS to pilot through the various missions. High-Mac AWGS are surprisingly nimble for war machines, and an effort has been made to give the player as many aspects of a High-Mac's capabilities as possible within the scope of a Saturn control pad. At press time, the player is able to raise and lower the turret, rotate the torso 180°, and fly for short hops — in addition to being able to aim, lock, and fire the weapons systems, of course.

Two previous assault robot titles for next-gen consoles, *Krazy Ivan* and *Metal Jacket*, yielded one hit and one miss respectively for PlayStation. Similar titles for Saturn, *Thunderstrike 2* and *Shell Shock*, have proved that such games can be extremely well done for the system. Hopefully, *Iron Rain* could push even further into the realm of futuristic combat.

Few 'mech games are seen in the US, but this should be worth waiting for
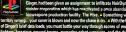
"HOT GAME."
– US News and World Report

"THE GRAPHICS ARE AMAZING... FANS WILL BE IN JOY STICK HEAVEN."
– Computer Gaming World

"THE HIVE IS WHAT REBEL ASSAULT SHOULD HAVE BEEN... AGGRESSIVELY ORIGINAL... GROUND BREAKING..."
– Strategy Plus

As agents for the Galactic Federation, you and your partner, Ginger, had been given an assignment to infiltrate NoirDyne, a sinister corporation which has reactivated a once abandoned bioweapons production facility. The Hive. ♦ Something went terribly wrong... your cover is blown and now the chase is on. ♦ With the help of Ginger's brief data loads, you must battle your way through scores of enemy fighters, ferocious ground troops, menacing robot weapons, and the deadly alien Hivesects. ♦ Awesome action/arcade game play and killer graphics that will blow you away! ♦ 16 bit stereo sound. ♦ 20 pulse-pounding interactive scenes. ♦ Two game play styles... gut-wrenching action sequences combined with never-before-seen Panoractive game play that puts you in the middle of the action. ♦ Download our free Windows 95 demo from http://www.trimarkint.com or from Trimark's folder on Compuserve's Game Publishers Forum "B".

PlayStation

FREE DEMO

THE HIVE™

TRIMARK INTERACTIVE

rainbow

MATURE
M

Enter the great game of espionage and win!

5 grand prizes:
an International Espionage adventure in the Bahamas

You and a companion can solve your own realistic spy mission on a 5 day/4 night stay in Nassau, Bahamas. Learn the tricks of the trade: bugging, video and night-vision surveillance, scuba diving, martial arts and more!

10 first prizes:
a spy attaché case

Includes Nikon binoculars, Gargoyle™ sunglasses and other specialized spy equipment.

150 second prizes:
a Spycraft t-shirt

150 third prizes:
a Spycraft 3-D mouse pad

Entry forms available at participating retailers. See below to enter by mail.
Or enter the Web of Spies at http://www.activision.com

No purchase necessary. Sweepstakes ends 5/13/96. Open to residents of US and Canada, 18 years or older. Void in Quebec or where prohibited by law. To enter by mail, send a 3 x 5 card with printed name, address and telephone number to: Spycraft Sweepstakes, P.O. Box 52990 Dept. 7440, Phoenix, AZ, 85072-2990. Entries must be postmarked by 5/13/96. One entry per envelope. Electronic entries must be received by 5/13/96. For rules send a SASE to: Spycraft Rules, P.O. Box 52912 Dept. 7441, Phoenix, AZ, 85072-2912. Residents of VT/WA may omit return postage.

SuperClub **Breezes** BAHAMAS

International Espionagetours
800.525.6888

imagine
a new way of publishing

ACTIVISION®

★ f i n a l s

An examination of the underbelly of today's hottest games

E ach month, **NEXT Generation's** team of diehard game reviewers plays and rates the month's newest titles. Our critiques of each game's merits is clarified in the main text, but as a rough guide to a game's worth (or lack of it) then refer to the following ratings star key.

★★★★★ **Revolutionary**
Brilliantly conceived and flawlessly executed; a new high-water mark.

★★★★ **Excellent**
A high-quality and inventive new game. Either a step forward for an existing genre, or a successful attempt at creating a new one.

★★★ **Good**
A solid and competitive example of an established game style.

★★ **Average**
Perhaps competent; certainly uninspired.

★ **Bad**
Crucially flawed in design or application.

PlayStation

Descent
Publisher: Interplay
Developer: Interplay

One of the most popular and mildly groundbreaking titles to hit the PC last year arrives on a home console. *Descent* is a lot like *Doom* (ahem), except this time

PlayStation's version of *Descent* adds a few new bells and whistles, keeps the same solid gameplay

you're flying a small ship through a series of installations carved into small asteroids. Since all the asteroids are small (cosmically speaking, the levels are progressively huge), there's practically no gravity, and no definable "up" or "down." So while it's another first-person shooter, the player is able to pitch, yaw, and roll in a nausea-inducing full 360°.

The pace is fast and the action can get intense. The designers at Interplay, not content with doing a straight port, went out of their way to utilize many of PlayStation's features. Plasma beams have been light-sourced, for example, so they light up the walls as they fly down corridors. The new, CD-based soundtrack includes a few grinding original cuts by industrial bands like Skinny Puppy and Type O Negative, and best of all, the networking option from the original PC version has been retained in the form of compatibility with the PlayStation link cable. The game's controls are necessarily complex and take a little getting used to, but they're relatively intuitive and easy to pick up.

The experience is a little dry, however — not disappointing, just

PlayStation

BAD TO THE BONE

Resident Evil
Publisher: Capcom
Developer: Capcom

Put simply, this is one of the best games we've seen yet for a next-gen system. A jaw-dropping graphic adventure with plenty of action thrown in, *Resident Evil* takes the basic play mechanics of the *Alone in the Dark* series and runs with them, combining 3D polygon-modeled characters with prerendered backgrounds. This means viewing the action from a limited number of camera angles, but puts much less demand on the PlayStation's polygon engine, enabling the characters to have an incredible level of detail.

Resident Evil is one of those rare horror games that manages to be as genuinely scary as a good horror film — no small achievement. There are a lot of things that work against games being this frightening, in part because going over the same ground several times can kill suspense, and game characters usually aren't realistic enough to identify with. In this case, however, the fine character work, creepy and well-executed sound effects, and just the right music in just the right places all have a subtle, cumulative effect — it's almost guaranteed to raise the hair on the back of your neck. It also helps that while it's a good-sized game, none of the puzzles are exactly stumpers, so it moves along at a good pace and there's always something new to pump out at you. Better still, at the game's start, you can play as one of two characters, and the game follows a different storyline with each character.

In fact, there's only one flaw we noticed — the dialog and voice acting are laughable (sample: "Take this lockpick. You, the master of unlocking, can use it best"). Just once, it would be nice to see a company chip in a few extra bucks, or simply care enough, to hire a decent writer and voice talent that actually had talent. Here, it's a glaring fault in a game that's otherwise a small landmark of quality design. As distracting as it is, however, it's a testament to everything else about *Resident Evil* that you can mostly ignore the gaffs and move on.

With liberal amounts of action, challenging game play, smooth control, and plenty of genuine scares, this is one game nobody should be without.

Rating: ★★★★★

A squad of commandos take on the forces of darkness in *Resident Evil*

Scary, bloody, and loaded with action, this game has it everything a good horror game should

90

mildly repetitive. Also, the enemy AI doesn't seem as challenging as in the PC version, although to be fair, that may simply be a reflection of being overly familiar with it by now.

Overall, you still can't go wrong, and if you've got the ability to fly against someone else, it doesn't get much better.
Rating: ★★★★

Battling other giant robots is fun, but *Krazy Ivan* just doesn't last long enough to let you enjoy it

Krazy Ivan
Publisher: Psygnosis
Developer: Psygnosis

Compared to the disappointing *Metal Jacket* (a Japanese release from Solan), any giant assault robot game for PlayStation looks good. *Krazy Ivan*, however, stands on its own as a qualified success.

Each stage has the same structure: the combat area is divided into four or five (depending on the stage) "arenas," in which you square off one-on-one against an alien combat robot, then get harassed by other, lesser war machines between battles as you make your way from arena to arena. When all the aliens in a stage have been defeated, you take out the alien generator and free the sector. The game is incredibly well animated, and every stage is half-shrouded in fog, which completely hides any draw-in. Between stages you get a chance to upgrade weapon systems and the sprinkled FMV sequences range from painless to humorous.

On the other hand, while the game is set all over the world, from Russia to Japan, there's little variation from place to place. The enemies are different, but the stages are functionally laid out the same way and there are only five of them. And like other PlayStation titles, you can beat this game in a few hours. It supports the PlayStation link cable, so you can battle other human players, and if you can afford the set-up, it extends the value greatly. In the end, *Krazy Ivan* is a good game of which you just wish there was more.
Rating: ★★★

Saturn

Hi-Octane
Publisher: Electronic Arts
Developer: Bullfrog

Yet another in what is sure to become a long list of PC ports to the 32-bit consoles, *Hi-Octane* from Bullfrog suffers deeply from PC-itus. While the PC has only recently become known for fast, smooth gameplay, these are features that have been expected for years. With its blocky graphics, devilishly slow frame-rate, and nebulous controls, *Hi-Octane* simply lacks the focus of most console genres. Due to the fact that the PC version is just less than a year old, it would have been nice to see some sort of update in the console version, but the game is a very direct port.

Reminiscent of Psygnosis' *Wipeout* or Sega's *Cyber Speedway*, *Hi-Octane* simply doesn't match up to the refined graphics, smooth gameplay, and

While *Hi-Octane* may look like other recent 32-bit hovercraft racers, it unfortunately does not have the same smooth gameplay

responsive controls of these console titles. One truly awesome concept introduced, however, is the realtime morphing tracks which add a great deal to the game's challenge and is sure to be a feature copied in future

racing titles. The line between the PC and 32-bit consoles has grown hazy in the past year, but titles like *Hi-Octane* prove that what works on one machine may not work so well on the other.
Rating: ★★

GUARDIAN VARIETY

Guardian Heroes
Publisher: Sega (Japan)
Developer: Treasure

So far on the 32-bit systems we've seen side-scrolling platform games, 2D fighters, shooters, and now, the side-scrolling beat-'em-up has made the jump from 16- to 32-bit.

Guardian Heroes may be the pinnacle of the genre, but even the best is still a bit on the mindless side. There is no questioning the game's graphic prowess and ability to handle many, many sprites onscreen at once without any slow-down, but it's hardly a reason to buy a next-generation machine. There are nice innovations, such as the use of three separate levels of field depth which gives it a 3Dish feel, but it's nothing to exactly marvel over. Other passive touches include a Vs. mode, the ability to play with as many as six players at once, and smooth sealing.

In the end, *Guardian Heroes* is a dream-come-true for die-hard fans of the genre, and good mindless fun for the rest of us, but not much more. The enemy AI is still less-than-impressive and the action is predictable and repetitive. What's perhaps most disappointing, however, is the under-use of the hardware. Treasure's dedication shows through in the graphics and character development, but seems to have fallen short when it came to using the potential power of the system for creative gameplay.
Rating: ★★★

Reminiscent of games like *Final Fight* and *Streets of Rage*, *Guardian Heroes* revisits a classic genre in a major way (top). Your character's ability to leap from one field of play to the next is little more than an homage to 3D gameplay (left)

rating 3DO jaguar

The graphics of World Cup Golf alone are enough to make this title stand out in a long list of mediocre golf games

World Cup Golf: Professional Edition

Publisher: U.S. Gold
Developer: ARC Developments

It is every writer's nightmare to have to review a golf game, not because no one likes golf games, but rather because there is so little left to say about the genre. Fortunately, World Cup Golf is a strong enough title to support at least one more review. What makes playing this game so enjoyable isn't its ingenious interface (because the interface is barely noticeable); nor is it the realistic bed sounds which break the game's silence on a regular basis. And it's not the dramatic fly-by feature it demonstrates on every tee shot. What makes World Cup Golf fun to play is the realistic and simple gameplay.

Featuring several modes of play, including Single Match, Skins Match, Texas Scramble, or Tournament Play, World Cup Golf does a very nice job of taking you to the links in a comprehensive fashion. Also adding to the sense of realism are the excellent graphics which depict the serene and beautifully kept Hyatt Dorado Beach course.

The only real drawback to the game is that there is only one course available for play. It seems almost a shame to create such enjoyable gameplay and then only offer one course on which to enjoy it. Hopefully, there are follow-up courses in the works.

Rating: ★★★

3DO

Lucien's Quest

Publisher: Panasonic
Developer: Micro
Cabin/Panasonic

While by this time the 3DO has seen at least one attempt in practically every genre, the classically Japanese style of RPG hasn't been one of them, until now — and some days it just doesn't pay to get out of bed.

It's difficult to pin down exactly where this game goes wrong. It could be the primitive game mechanics — a more paint-by-numbers RPG scheme is hard to imagine. It could be the uninspired storyline, or rather, lack of any story at all — this is a series of episodes with goals, not a story per se. Maybe it's the god-awful dialog and lame humor — wading through the game's text is the literary equivalent of having a conversation with a hyperactive 10-year-old.

This is a shame because there are hints of creativity here and there. The traditional 2D, sprite-based characters have been set down in a 3D polygon-modeled and texture-mapped world, which gives the game a different and, at times, relatively impressive graphic style. The battle sequences are nicely animated, and some of the special effects the developers pulled out when casting spells, like the rippling ground produced by an earthquake, are incredible.

The few interesting parts are crippled, however, by the game's lackluster execution. It's not a painful experience, and it's over quick enough (more experienced RPG fanatics can expect to finish this in all of 10 hours) but there's not much to recommend it either. This is as average as it gets.
Rating: ★★

Jaguar

Brett Hull NHL Hockey

Publisher: Atari
Developer: Ringler

It could be argued that a good hockey game is enough to sell an entire hardware system. There is, after all, probably no other sport that matches so closely the formula for an exciting videogame. Brett Hull NHL Hockey makes a valiant effort at fulfilling the promise of a great hockey game and, in fact, does offer all the features that would be found therein, but it misses on one very crucial aspect. Smooth action.

What makes a great hockey game more than anything else? Fast, realistic, and smooth action. The gameplay in Brett Hull NHL Hockey is plenty fast, and with real players and close attention to hockey's rules, the realism is effective. But the key element missing from the game is the smooth action. Aside from the fact that a hockey game needs to sell the illusion of moving on ice, it's important to keep the action smooth in order to follow the often hectic pace of the game.

Jaguar

Using new graphics and gameplay, this is a '90s version of the classic (top). The third option blends D2000 and the original

RETROFIT

Defender 2000

Publisher: Atari
Developer: Atari

Anyone who claims not to have been blown away by the original Defender so many years ago is either A) a liar, or B) too young to be reading this magazine. And thus it seems logical that the release of Defender 2000, an updated version of the arcade classic, should generate quite a stir among older game fans. The hitch is that the reason Defender was such an exciting game was because no one had ever seen anything like it before. On the originality scale, where Defender was a 10, Defender 2000 scores considerably lower. It's fun for nostalgic reasons, and the inclusion of the original game is a nice touch, but then reality sets in. It's much the same experience as returning to Disney World as an adult; Space Mountain is still cool, but this time all you think about is how hot those Mickey masks must be.

When isolated from its heritage, Defender 2000 is a fun, good-looking, sexed-sounding shooter charged with a pulsing soundtrack. But that description could tag any number of recent shooters. There's no doubt this title stacks up nicely against all the games that copied its original formula, but it's definitely in the same class. If you're convinced Defender was the coolest game ever, then buy Defender 2000 ASAP, but judge it not as an integral part of videogaming history (which it was), but rather as a fun, but less-than-amazing shooter.
Rating: ★★★
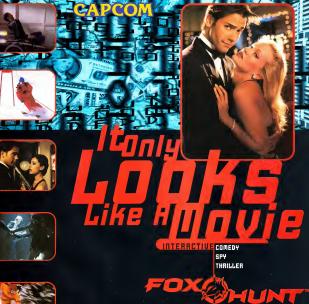
Brett Hull's herky-jerky nature not only takes away from the realistic look, it also makes it difficult to follow the action of the game.

In the end, Brett Hull NHL Hockey, with its three camera options, commentating from Al Michaels, full NHL roster, and realistic graphics, would have no problem holding its own against any competitor if it weren't for the choppy gameplay.
Rating: ★★

Brett Hull's graphics and viewing angles make it a worthy title

rating neo-geo pc

Atari's first stab at a 3D brawler, Fight For Life manages the look of a next-generation fighter

Fight For Life
Publisher: Atari
Developer: Atari

Upon first glance, Fight For Life, a 3D polygon-brawler à la Virtua Fighter, appears to be a true next-generation fighting game. The polygonal characters are nicely defined with detailed texture maps, the animation is smooth enough not to notice otherwise, and the rotating camera swings about the ring in true 3D form.

The problem comes when the gameplay is put into action. While each of the eight characters has a generous list of special moves (a list that's expanded with each victory), calling on your characters to show off their fighting process is a painfully slow process. Beyond the dreaded lack of snappy response, Fight For Life also takes entirely too long to run the course of a single match. A single fight should never last long enough to bore the player, but this one does.

There are a few nice features, like the ability to move in real 3D, and its innovative defense system, but when paired with the sluggish gameplay, the strengths just aren't enough. What keeps this game from being really good is not a lack of good solid fighting game features, but rather the failure to make them all work at a pace fast enough to make this the exciting game it was intended to be.
Rating: ★★

Zoop
Publisher: Viacom
Developer: Hookstone

Ever since the gargantuan success of Tetris, developers have

With its bright colors and simple graphics, Zoop maintains the classic look of the puzzle game

been shooting for that next big hit in the puzzle genre and while Zoop is an enjoyable game, it's not exactly the second puzzling. Following in the footsteps of other popular puzzle games, the graphics are ultra-simplistic to the point of being boring. The action, on the other hand, is fast-paced and demands the attention of the player from the very start. The strategy elements of the game consist of matching like colors to diminish the encroaching stacks of geometric shapes while protecting your central position in the ring. The twist is in the method of changing your own color which affects your ability to fight back the snakes.

Zoop is the kind of game that either will or won't grab you, but it's not the kind of game that's likely to consume countless hours of your life. Games like Tetris and Bust-a-Move have an undeniable magic, and while Zoop has the mechanics of a great puzzle game, it lacks that magic. What's great about a game like Zoop, though, is that it doesn't take much of a time investment to test it for yourself and you won't lose your girlfriend or the process.
Rating: ★★★

Neo-Geo

Real Bout Fatal Fury
Publisher: Neo-Geo
Developer: SNK

Neo-Geo has made more 2D fighters than every other software company combined. And all that practice has started to pay off with Real Bout Fatal Fury.

You're can move in three 2D planes, destroy objects in the background, and fly go off the edge. The characters from the Fatal Fury series are all here and their moves have all been balanced to make this one of the best Fatal Fury titles ever.

At first glance this looks like every other Neo-Geo game, but after a few plays you'll be able to tell that Real Bout Fatal Fury is a very solid fighting game.
Rating: ★★★

Pulstar
Publisher: Neo-Geo
Developer: SNK

In a time when shooters have ceased to advance beyond early '80s innovations, Pulstar hits the shelves as if to reinforce the genre's nearing death.

The game looks and plays much like Atari's Defender, with a couple of differences. The graphics are improved, the game is slower, and the gameplay is just not as fun. If it weren't for the

molasses like pace of the game, then Pulstar could've been another generic shooter. Instead, it's even worse.
Rating: ★

Samurai Showdown III
Publisher: Neo-Geo
Developer: SNK

Samurai Showdown is easily one of the most successful 2D fighters in the expansive Neo-Geo library. The Japanese market can't get enough, and the large cult following in the US accounts for the third installment in the series. The classic Shodown gameplay is intact here, along with some tweaked gameplay elements. Fans of the first two won't be let down by III, but there should be a much larger jump in quality in the sequel.
Rating: ★★★

Sickly scenes like this are commonplace in Bad Mojo (below)

In one of the first puzzles you'll have to face, you'll have to manipulate this cigarette to keep from being eaten alive (above)

COCKY

Bad Mojo
Publisher: Pulse Entertainment
Developer: Pulse Entertainment

There's a slough of graphic adventures featuring rendered, photographic quality visuals, digitized sound, FMV, and plenty of multimedia flash. Most of them fall flat on their face, being unexplored, senseless affairs that have you clicking randomly around a screen hoping for something to happen to advance the story. So it's refreshing when something new comes along.

Bad Mojo isn't the best graphic adventure, but it's got something that counts a long ways — peculiarity. No other adventure has ever cast the player in the role of a cockroach. Additionally, no other adventure has been as willing to show the savage gruesomeness of mankind's sloth.

Entomologist Roger Samms is transformed into a cockroach before he can escape with 1 million dollars in purloined research funds. Using only three arrow keys, you guide Roger, in cockroach form, through the underbelly of a condemned apartment building in the bad parts of San Francisco. All things repulsive are in this environment, from the rotting corpse of a trapped rat to the neighbor whose pants are always four inches too low, a T-shirt of indeterminate coloring, and a can of warm beer in his beefy, sweaty hand.

Bad Mojo isn't for everyone. If you're squeamish or have a weak stomach, you should probably steer clear. But if you're looking for something "refreshing," well then it's worth a look.
Rating: ★★★

YOU'RE GOING DOWN.

DESCENT™
DESCENT II

DESCENT™
New For PlayStation!™

What you've been waiting for.
True 360° movement in 3D.
30 gut-wrenching levels.
Robot enemies that learn your moves.
Descent is now on PlayStation.™
And you're going down.

Descent is the only game with 3D gut-churning
levels of true 360-degree 3D madness,
including 5 new anarchy levels.

"Practically the definition of cool!"
Game Players

"Can you say Vertigo?"
Next Generation

New special effects found only on
PlayStation™ features the alternative rock of
Type O Negative and "Ogre" of Skinny Puppy.

DESCENT II™
New For PC!

Introducing Descent II.
10 new weapons, 30 new levels.
Toggle floodlights, afterburner
speed doubler. Twice the
360-degree insanity.
You're going down.
Again.

30 new mind twisting levels • 10 new destructive
weapons systems including the fully automatic
Gauss Cannon • Pure 360-degree madness!

"Sequel of the year!"
Computer Game Review

New "guidebot" ally leads you through levels.
• Toggle beam floodlights that turn on and
off. • Afterburner that doubles your speed.

Interplay

BY GAMERS. FOR GAMERS.™

Developed by
Parallax Software

Download the 3-level Descent II demo at
http://www.interplay.com

THE MINDWARP WILL SUCK YOU IN.

MAXIS®

Episode 1 is waiting.

http://www.maxis.com

Mind-boggled? Call 800-33-MAXIS.

PC
SILVER BULLET

The Beast Within: A Gabriel Knight Mystery
Publisher: Sierra On-Line
Developer: Sierra On-Line

Known for its graphic adventures, Sierra On-Line is trusted to dream up rather advanced techniques for drawing players (lord knows it's got the money for it). Using the same engine introduced in *Phantasmagoria* (but in far better ways), Jane Jensen, creator of the first of the series, continues the story of shadow hunter Gabriel Knight. This time, he's in Germany battling ferocious werewolves.

As far as graphic adventures go, this is one of the best. Incorporating a detailed and evolved storyline with an easy-to-use yet sophisticated graphic system is no easy feat, yet *The Beast Within* succeeds beautifully. Although it uses the exact same engine, it's much longer than *Phantasmagoria*, so there's a whole lot more gameplay. The game is six CDs long, though, so be prepared for a lot of disc swapping. It has the same concept as *Phantasmagoria*, with each chapter contained in a single CD, but this time you get more on each CD than the same rendered locations which were *Phantasmagoria*'s downfall.

The game also enables you to play one of the more interesting characters from the Gabriel Knight story, his assistant, Grace. Wonderfully played (and appropriately sardonic); she's a great change from the southern drawl of Gabriel. *The Beast Within* blends FMV into a graphic adventure that can be both humorous and frightening. Hopefully, this one is the first of many yet to come.
Rating: ★★★★

Extraordinary scenery and a subtle eerie tone give this graphic adventure a tone similar to, but not the same as, Sierra On-Line's lest megahit *Phantasmagoria*.

There are all sorts of platforms to run and jump from in *Arcade America*, the twisted, new and moderately fun cartoon adventure from 7th Level

jokes, so while the cartoon graphics might make this title child-safe, you probably wouldn't want them anywhere near it. *Arcade America* even goes so far as to show the crack in Joey's low-pants character, and we won't even mention what happens when your character runs into the rear of a bear on the road.

The gameplay, however, is surprisingly smooth for a Windows game. It's an interesting platform puzzler, and some of the

CyberMage
Publisher: Origin
Developer: Origin

D.W. Bradley, the creator of Origin's *CyberMage*, is probably best known for his Sir-tech published *Wizardry* series of RPGs. With *CyberMage*, Bradley took a

genre that's growing old — the just-like-*Doom* but style that's so prevalent nowadays — and made it even older.

Sure, there's a lot of great new things you couldn't do in *Doom*. You can, for example, use either technological weapons such as grenades and fusion guns, or you can use magical powers (called *mang*) to inflict damage on your enemy. There are all sorts of items to find, puzzles to solve, and keys to locate, and even a very sharp high-res mode that makes *Doom* look like *Wolfenstein 3D*. But you still wonder around mazes and shoot the bad guys, still try to find better weapons, and still survive by your fire-key abilities.

CyberMage has great graphics, beautiful sound, digitized video, and a detailed, entertaining storyline. It's too bad, for all that, that it still doesn't stand above the rest of the first-person shooters that clog software store shelves.
Rating: ★★★

Occasionally you run into helpful resistance fighters in *CyberMage*

Druid's combat interface is simple, but it becomes boring

Druid
Publisher: Sir-tech
Developer: Sir-tech

If there's a happy medium between computer role-playing games and graphic adventures, Sir-tech seems to have found it. *Druid* plays like a graphic adventure. You move your character around, collect items, solve puzzles, and think your way out of dangerous situations. And yet it also has elements vital to RPGs: experience points, magic spells, conversations with nonplayer characters, and hand-to-hand combat.

Sir-tech managed all this in a rather seamless interface that, while still awkward at times, is a quick and easy way for novice players to get into the game. Experienced gamers will pick it up immediately. The graphics are crisp and beautiful, though you'd better have a powerful machine if

challenges will surprise even the most adept gamer. Still, if you're looking for a good action title, there are better ones out there.
Rating: ★★★

97

rating pc

you don't want to feel like you're moving in slow motion.

Nevertheless, hardcore fans of either RPGs or graphic adventures won't find much satisfaction. The puzzles can be rather simple, and though the story is well crafted and deep, role-playing fanatics will be annoyed at the lack of statistics and manipulation of your character. Still, if you're just getting into either genre, this one does a great job of taking some of the best aspects of both.

Rating: ★★★★

Frankenstein: Through the Eyes of the Monster

Publisher: Interplay
Developer: Amazing Media, Inc.

Imagine, if you will, a world where Tim Curry is Mary Shelly's maniacal, demented Dr. Frankenstein. Now, imagine waking up as a monster, created for no other reason than scientific curiosity. If you can do that, you've already had more fun than you would if you played *Frankenstein: Through the Eyes of the Monster*. Surpassing even *Shivers* in lack of gameplay, logic, and fun, *Frankenstein* is a trip through a truly boring and

Tim Curry plays Dr. Frankenstein in *Through the Eyes of the Monster*. Shouldn't he be wearing a lordier miniskirt and tons of lipstick?

noninteractive environment that's sure to give you nightmares, but not of the kind intended.

You play Dr. Frankenstein's famous monster. Robert DeNiro you're not, and Tim Curry is a far cry from Kenneth Branaugh. As you continue on, you'll solve a multitude of tedious puzzles set before you. Some of the puzzles don't even make sense, such as the hedge maze, which seems to change pattern at will.

The end result is a game that makes about as much sense as bathing in sewage. It's got pretty pictures and plenty of multimedia glitz, but in a day and age when

that stuff is a dime a dozen, it just doesn't cut it.

Rating: ★

Grand Prix Manager

Publisher: Spectrum Holobyte
Developer: Spectrum Holobyte

Regarding Formula One racing, the introduction to *Grand Prix Manager* states: "Essentially, it's as much about book-keeping as it is about driving fast." With this in mind, *Grand Prix Manager* succeeds very well at its goal — simulating the responsibilities and roles of a Formula One team manager. If you're someone who's been dying for a simulation of this sort to hit the market, then your prayers have been answered.

One of the many detail-intensive screens featured in GP Manager

If you're a game player who desires a little bit of fun in the titles you purchase, however, stay far, far away. People work day in and day out accomplishing the tasks this game sets before you, but they get paid to deal with cranky vendors, snotty drivers, and touchy mechanics. Why shell out $50 for the same experience?

There's some things that don't make good simulations. Formula One racing is a great source of excitement, provided the player can sit behind the wheel and experience the 200 mph thrill of a race. Dealing with the tedium while watching computerized drivers have all the fun simply doesn't make for an entertaining game. Period.

Rating: ★★

Screamer

Publisher: Virgin Interactive Entertainment
Developer: Graffiti

There's a whole lot of racing sims on the market. Screamer, however, has something most don't — it's a lot of fun without requiring a Ph.D. in racing mechanics to appreciate. The game has more of an arcade feel than a sim, which is a plus if

---

FEATURELESS

Shannara

Publisher: Legend Entertainment
Developer: Legend Entertainment

Terry Brooks' Shannara book series are some of the best in the fantasy genre. The quality and depth of the realm of the Four Lands make his works almost historical in content. That's what has drawn his readers back for more time and again, through all seven of the novels in the series. Yet, strangely, that's exactly what's missing from Legend's graphic adventure based on his works.

The story is incredibly linear — you have no choice but to follow an exact path laid before you. That's not so bad if the path contains an entertaining and strong story, but the tale here is incredibly boring. There's hardly any depth to the plot — the evil nemesis of the first book, Brona, returns to wreak his revenge on those who destroyed him (woo-hoo). It sounds more like a "Star Trek" episode than a Terry Brooks story.
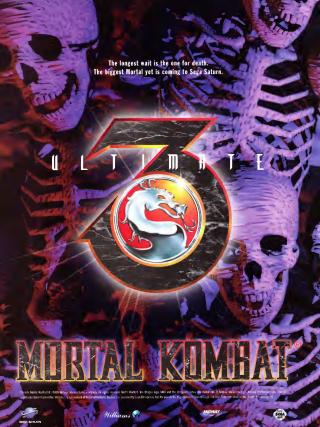
The interface is typical Legend material, slightly reminiscent of *Mission Critical*. Except this time, there's a clunky overhead view for moving the characters over a long distance. The combat interface is probably one of the worst of its kind. You see a picture of a monster, and you can either attack or retreat. Not exactly heart-stopping stuff.

It's difficult to determine if the overhead view in Shannara was intentional, or a cruel joke. The combat scenes in Shannara make a mockery of decent computer role-playing games

The cinematic sequences unfortunately fell flat with dated graphics and uninspiring music

This one loses on many counts. If you're a fan of Brooks, you'll be disappointed in the lack of his trademark story elements. If you like graphic adventures, you'll be disappointed in the clunky interface, drab graphics, and overly simplistic puzzles. In any case, it's one to stay away from.

Rating: ★★

you're just looking to get the cars on the road. You're able to drive a variety of sports cars, from a Ferrari to a Porsche. The tracks are varied, and if you're lucky enough to have more than 12 megabytes of RAM on a Pentium machine, you'll get to see some gorgeous scenery.

Still, this is a simplistic title. It's a challenge to rise through the ranks in the championship mode, but you're still only racing around in circles. In an effort to make things more interesting for lone players, there's some special racing modes, when, in order to finish the track under a certain time, you have to either hit cones along the way or drive in a slalom.

The inclusion of an eight player network mode rounds it out as a quality racing title. There may not be a whole lot to it, but the graphics, playability, and selection of cars with their different qualities make it a title worthy of a look.

Rating: ★★★★

Separation Anxiety
Publisher: Acclaim Entertainment, Inc.
Developer: Software Creations

Windows 95 is opening doors to the generation of 16-bit platform gaming titles. If these are the games that we're going to see, however, perhaps it wasn't such a good idea after all.

Separation Anxiety follows the uneasy alliance of Marvel comic book characters Spiderman and Venom. Their mission is to recover five alien symbiotes who, when joined with men of evil intent, can wreak havoc on the world. You can play either as Spider-Man, Venom, or both.

This is an arcade bash-fest with little in the way of the intricacy and depth possible in a PC game. It's a great port of an action game to the PC, and it might be welcomed by players eager to try out what they've been missing without a Super NES, but nowadays these games are a dime a dozen in cartridge form. Considering the price of a present 16-bit system, it would make more sense to use the Windows 95 CD for a coaster than as a basis to play a game like this.

Rating: ★

Shivers
Publisher: Sierra On-Line
Developer: Sierra On-Line

Will Myst ever die? Sierra's newest addition to the overused, over-done, and over-popular genre is a game that puts you in the shoes of a teenager stuck in a abandoned museum overnight. Created by a scientist (sort of like a deranged Robert Ripley) obsessed with the unlikely, the

One of the first frustrating puzzles you'll find in Shivers

place has a history of the unusual. Two teenagers mysteriously disappeared there 15 years earlier, and, of course, there's evil demons roaming the halls, looking for human life-essence to suck down like a cool lager. It might sound like the basis of a decent graphic adventure, but the long load times, grating music, and overexacting puzzles keep it mediocre at best.

The graphics are stunning, there's lots of live action video, sound bites, and an easy-to-use interface; but in the end, the game challenges you to solve a bunch of puzzles, unlock an endless doors, gawk at rendered objects, and test your mouse button clicking skills.

Rating: ★★★

Arcade

Avengers in Galactic Storm
Publisher: Data East
Developer: Data East

Data East has orchestrated all the elements to piece together what

would seem like a good fighting game — a Marvel license for the Avengers, 3D rendered characters and graphics, and a twist enabling players to summon extra characters into the game.

For all of this hard work, in addition to moving into an area — rendered 3D graphics in a fighting game — Data East got this scenario on an average Saturday

Galactic Storm's weak gameplay is slightly enhanced by its 3D characters

Genesis

STUFFED

College Slam uses NBA Jam gameplay but doesn't use players' names or numbers

College Slam
Publisher: Acclaim
Developer: Iguana

The original NBA Jam was a major hit at the arcades more than two years ago with its "real" NBA players, impressive graphics, spectacular dunks, and four-person play. Since then Jam and its various incarnations (T.E.) have appeared on every system known to the human race. And while the first few were major hits and technologically sound games, each new addition just got increasingly stale and has been surpassed by games with sharper graphics, smoother play, and more realism.

The gameplay and engine of NBA Jam are now being put to the college game in College Slam. Unfortunately, companies can't use photos or names of college players, which eliminates one of the original charms of NBA Jam. There is an option to enter your own names for players and edit their stats, but without the pictures or realistic likeness on the court (often the wrong skin color and size), you never get the feel you're really controlling a college team. Add to that sample and blatant mistakes like making the uniform colors completely wrong (Illinois doesn't wear white and blue uniforms), and College Slam isn't original, realistic, or any kind of improvement over the first NBA Jam.

Rating: ★★

Arcade

RENDERED USELESS

Characters have grown bigger but, in some cases, wear less clothing than in Alf (top left). Background themes are taken from every time period imaginable. Spinal gets deboned (above)

Killer Instinct II
Publisher: Midway
Developer: Rare/Nintendo

With every successful game comes the inevitable sequel, *Killer Instinct*, an aberration of *Mortal Kombat*, is like the Frankenstein of fighters — a prerendered construct of other titles strewn together — and now we have the bride, or son, of Frankenstein, *Killer Instinct II*.

The nicely rendered fighting creatures sport the same multimove-intensive strategy as before, they're larger and better looking, and there's more of everything that made this title a hit the first time around — ultras, combos, blood, gore, not-so-subtle sexism (all female characters are abnormally chesty), and the great stereo sound of the first as well. That is, if you like the style of fighting that relies more on memorizing combos than hand-eye coordination and, in a way, skill. *Killer Instinct II* is full of that same fighting style.

The larger characters have been rendered in clean, sharp sprites, appear more detailed, and now show more definition, though they still don't fight in true, realtime 3D. So, while all the characters may look better, the consequence is slower, even choppy movement, and though it's a subtle difference, the fighting is slowed down, too.

There are at least 15 new backgrounds, a number of them are slightly interactive, though only in the most boring way — Spinal's ship contains breakable crates and moving skeletons, for instance — and the return of nine characters from the original, including three new ones. Of the returning characters are Fulgore, Glacius, Jago,

Orchid, Sabrewulf, TJ Combo, Reptor, Chief Thunder, and Spinal. The three new characters include Kim Wu, a female nunchaku-wielding Ninja; and Tusk, an over-muscled long-hair brute who wears nothing more than a sheath over his crotch.

KI II highlights, like the first, imbalanced and less strategy-intensive fighting (based on memorizing combo moves that add up to more than the sum of their parts), and has broadened its approach with new fighting elements, yet without changing much from the original. Among the new features are Fake moves, Dash moves (for some of the characters), Ultras, a Super Meter (obviously borrowed from Capcom's *Dark Stalkers* and other titles), Run-past moves, and more.

But as a whole, this new coin-op is what *MK III* was to *MKII* — a money-maker with the same premise, look, and gameplay as the first, adding just enough changes to call a "new" game.

Rating: ★★★

rating arcade

Arcade

BORN TO BE WILD

Manx TT Super Bike
Publisher: Sega
Developer: Sega AM3

With the release of Manx TT Super Bike, one of the fastest and most dazzling bike coin-ops in the arcades, the world has just received the next evolutionary step in bike racing sims.

Based on the real-world and renowned races from the Isle of Man, Manx TT is the newest coin-op blast from the sizzling AM3 team that created Sega Rally Championship. Not only is Manx TT the only game that's ever made us actually dizzy, it simulates speed better than any other racing game ever (including Sega's own Indy 500). The eight-player linkable title features a sway system (the Active Motor Slider) in which you lean into each turn but never set your feet onto the ground; and by suspending the player entirely, Manx TT achieves a new level of player immersion and realism far above previous cycle racers, like the more recent Cyber Cycles or the now ancient Suzuka 8 Hours. The realism is maximized by the really fast action at 60 fps speed, a solid learning curve (in how to control the bike and in learning to control power slides), and is accentuated by accurate reverberation which responds to every thing you touch — rails, concrete walls, and most notably, those bothersome opponents.

Rival bikers near the dialogue of the Electronic Art hit Road Rash in terms of competition, but without the violence, and are meddlesome and clever — bumping, nudging, and cutting you off throughout the race — and they appear near the finish line to oust you any chance they get. What's wonderfully unique to the bike and reverberation system is the way opponents work with it — without notice or warning, the AI physically pushes your bike from behind, altering the direction of your course.

Offering sixgear manual or automatic transmission, just two viewpoints (over the shoulder and first-person), and only two courses, Laxey Coast (easy) and the winding TT Course (advanced), any other game would receive a lower rating, but Manx TT is a technically advanced tour de force in realistic simulation and easily earns our highest rating.

Rating: ★★★★★

The over-the-shoulder view is not nearly as impressive as the first-person view (top). If you traveled to the Isle of Men, you'd see these houses, those super bikes racing, and the occasional deaths of bikers and fans in the crowd (right)

at Golfland arcade: a huge crowd swelling in double digits around Street Fighter Alpha II, yet one more 2D fighter, and not one person playing Data East's fighter.

But Avengers boasts games, bells and whistles — like other current beat-'em-ups — that make it attractive. Two super meters, one when maxed out, enables you to summon a pre-chosen Avenger teammate to zoom in for a surprise whomping; and if the other meter is full, you can pull off an "Ultra," which resembles the Street Fighter Alpha screen-flashing Super Power Attack.

Other qualities that make Avengers right for success are that the characters aren't tiny, they're big. Offensive attacks are varied and the graphics resemble, in the loosest sense, Killer Instinct I's; and you could play in either Story mode (fighting in teams against the baddies), or Vs. mode, which is the familiar one-on-one side-viewing beat-'em-up. But the unfortunate lack of character fluidity, the sterile feel of the overall game, and the average gameplay and choreography, though not nauseating, was painful to watch.

Unfortunately, the competition is just too fierce in the fighting genre for an average game like Avengers to compete. Look at the long line of popular predecessors: Virtua Fighter I and II, Tekken I and II, Killer Instinct I and II, Mortal Kombat I through III, and Ultra MK, the entire Street Fighter series, X-Men, Marvel Super Heroes, Dark Stalkers, etc., etc., and our point is clear.

Rating: ★★

Sky Target
Publisher: Sega
Developer: Sega

What initially seems like a super speedy flying game well dressed in texture maps, polygons glitz, and full of promising gameplay, is nothing more than Sky Target — a fancy-smancy remake of After Burner, and a lot less fun.

In the beginning, you suit yourself up in one of four planes (F-14D, F-15S/MTD, F-16C, or the Rafael M) and can fly through gorgeous cities, cloud-filled skies, forests, and other environments, choosing from at least two different flight paths that hook up in the end for the mother of all bosses. Your goal is to avoid enemy fire, swerve through oncoming projectiles and airplanes, and blast everything in sight using either unlimited machine fire or heat-seeking missiles; and at the levels' end you're challenged with boss crafts that range from a deadly helicopter, a massive stealth bomber, and more.

The face
that launched a
thousand starships.

"Best game I've ever
been in!" Harika, Alien

"Visually rich—
a captivating sequel!"
Fred Ford and Paul Reiche III,
Designers – Star Control and
Star Control II

STAR CONTROL 3

THE FATE OF A THOUSAND WORLDS IS IN YOUR HANDS...AGAIN.

ACCOLADE

PRAY YOU'RE DREAMING

SKELETON WARRIORS ™

If you aren't, your
next prayer may be swallowed
in a gore-choked scream.
Because Baron Dark's
got a bone-to-pick with
the human race. And
it's up to you to
annihilate his evil
Lightstar Crystal and rip
apart his legion of
Skeleton Warriors™
hurtling at you in over
20 marrow-eviscerating
grisly, grueling levels.
All in skull-thrashing 3-D. But
don't worry. If you don't
conquer this evil, at least you
can finally rest. In peace.

PIE

16200 Trojan Way
La Mirada, CA 90638
(714) 565-1745

SEGA SATURN

PlayStation

http://www.playmatestoys.com

Yes, *Sky Target* is as well shaped in gaming terms as Cindy Crawford is in a swimsuit, but what's to talk about? The polygonal crafts and texture-mapped backgrounds are as good looking as any of the best looking games in the arcades (with little to no draw in and strong design), but the actual gameplay is so simplistic and formulaic that the blasting and dodging isn't a challenge after the first two levels. The single-seat cabinet with joystick is easy to control, but the acceleration throttle is gone, leaving the player with just a joystick, and the game only permits forward flying motion, unlike Sega's own *Afterburner* (which had the acceleration throttle) and the competition's

Sky Target's pretty backgrounds and graphics still don't make up for boring, formulaic gameplay

(Namco's) *Air Combat 22*.

The game would be different if it conveyed a different feeling, new maneuvering abilities, could be linked to others, or somehow brought something new to the genre, but somehow the strongest qualities of this flying shooter are about as distinctive as already chewed gum.

Rating: ★★

Virtual On
Publisher: Sega
Developer: Sega AM3

Virtual On, which was previewed in NG 15 as *Cyber Troopers*, is an unusual one-on-one action fighter that ups the ante on like predecessors by populating it with giant Gundam robots.

Although closely comparable to Namco's once-popular but sluggish tank game *Cyber Sled*, *Virtual On* only shares the basic premise: one-on-one fighting in an enclosed arena. But AM3, the makers of *Sega Rally* and *Manx TT Superbike*, has improved on all of rival Namco's basic game elements. By making innovative use of Z-axis 3D hovering and drifting moves, a swarm of various heat-seeking projectiles, and defensive sprints and blocks you're brought to a new level of play that's different from, faster, and

Gundam 'bots box it out in Sega's Cyber Sled-beating Virtual On

essentially more dynamic than any aspect of *Cyber Sled*.

Using double Model 2B boards to create its 3D playing arena, full 3D movement and combat, a twin *Virtual On* cabinet generates 60-fps action and quick camera action angles to zoom in on impressive explosions. You may get a lost in your first couple of tries simply because of the fast pace and whizzing projectiles, but once you've got a grip on the hovering mechanics and the range of your weapons, you'll find that the hide-and-seek strategies and guerrilla-based offensive attacks make this a phenomenally intriguing title. The influence of Gundam (a Japanese series that features animated robots) on Juro Watari and Koichi Ozaki, the producer and designer, is very apparent in the character

design. Inevitably, as with many robot games, the unique but nonhuman designs can make for awkward battles at times.

It will be interesting to see how US gamers react to Japanese robots and the often awkward, confusing up-close hand-to-hand battles. But with any luck, they'll see the depth of play and freedom of movement this hunt-and-kill title offers, and make it a hit.

Rating: ★★★★

NEXT GENERATION

New player animations are smoother and more detailed, letting you aim for the inside corner. "Zoom in" baserunner window let you make your best pick-off move to the bag.

BULLPEN

Watch your best reliever warming up in the bullpen, and analyze your starter's fatigue, pitch count, and performance. When he's ready to go, you're ready to go!

PLAYER EDITOR

Create your own players from scratch, or modify any player's ratings, or even their physical attributes! The resulting player will be true-to-life, on-field and off.

Experience the best of baseball history with the bonus "Legends" League—12 great legendary teams from history, come to life in 12 beautifully rendered old-time stadiums.

Optional wide-angle pitcher and batter views recreate the traditional look of a broadcast baseball game in beautiful 256-color SVGA graphics!

TEAM EDITOR

For maximum variety in gameplay, change any manager's tendencies on any team and see the results play out on the field and in the stats.

Hot new user interface gives you instant access to any feature. View and manage your team from the field, from the dugout, and from the General Manager's office!

This "fifth generation" fielding simulation has additional play animations, baseball plays, and graphics realism, resulting in true-life baseball gameplay.

It's all here: pick-off plays, hit-and-run, suicide squeeze, towering pop-ups, and more. The ultimate simulation of baseball, for everyone who loves the game!

PlayStation
PC CD-ROM

See for yourself!
For demo:
http://www.MndSpan.com/
MndSpan/hb5.html

HARDBALL 5

ACCOLADE

rating

32-bit gamer's guide

Your guide to every 32-bit game released so far

Finals roundup is **Next Generation's** reviews list which provides a fully inclusive compilation of all the significant next-generation games released thus far (and in this particular list, all Sega 32X games have been included). Please take note that some of the games reviewed here have been superceded by sequels. In this case, the review score of the original version should be considered out of date.

In addition, a rating out of five stars does not provide enough information on which to fully judge a game, so if you require further information, back issues of **Next Generation** can be ordered on page 32, or you can consult NG OnLine at http://www.next-generation.com/ng/ where full reviews are available.

Where a game name is accompanied by the suffix (Japan), it means the game (at press time) is only available as a Japanese import, and will not work on standard US machines.

Title	Publisher	NG Rating
PlayStation		
Agile Warrior	Virgin	★★
A-Train	SCE	★★★
Assault's Holiday (Japan)	ArtDink	★★★★
Arc The Lad (Japan)	SCE	★★★
Battle Arena Toshinden	SCE	★★★
Baser's Road (Japan)	New Corp	★
Cosmic Race (Japan)	Neorex	★
Crime Crackers (Japan)	Sony Entertainment	★
Criticom	Vic Tokai	★★
Cyberia	Interplay	★★★
Cyberspeed	Mindscape	★★
Cyber Sled	Namco	★★
Cyber War (Japan)	Coco Nuts	★★
Defcon 5	Data East	★★★
Dark Stalkers	Capcom	★★★
Descent	Interplay	★★★★
Destruction Derby	Psygnosis	★★★★
Doom	Williams	★★★★
Dragon Ball Z (Japan)	Bandai	★★
Gex	Crystal Dynamics	★★★
Goal Storm	Konami	★★★★
Gunner's Heaven (Japan)	Media Vision	★★★
In the Hunt	Xing	★★
In the Zone	Konami	★★
Jumping Flash!	SCE	★★★★★
Jupiter Strike	Acclaim	★★
Kileak The DNA Imperative	SME	★★★

Title	Publisher	NG Rating
Kileak The Blood 2	SME	★★
King's Field	Ascaware	★★★★
Krazy Ivan	Psygnosis	★★★
Loaded	Interplay	★★★★
Metal Jacket (Japan)	Solan	★
Mobile Suit Gundam (Japan)	Bandai	★★
Mortal Kombat 3	Publisher	★★★
Motor Toon GP (Japan)	SCE	★★
NBA Jam Tournament Edition	Acclaim	★★★★
NFL Gameday	Sony Interactive	★★★★★
NHL Face Off	Sony Interactive	★★★★
PGA Tour Invitational '96	Electronic Arts	★★★
Philosoma	SCE	★★★
Power Serve 3-D Tennis	Ocean	★★
Power Baseball (Japan)	Konami	★★
Raiden	Seibu	★★
Rayman	UbiSoft	★★★★
Resident Evil	Capcom	★★★★★
Ridge Racer	Namco	★★★★
Racer Revolution (Japan)	Namco	★★★
Road Rash	Electronic Arts	★★★★
Shockwave Assault	Electronic Arts	★★★
Space Griffon	Atlus	★★
Tekken	Namco	★★★★
Total Eclipse Turbo	Crystal Dynamics	★★★
Toukon Retsuden (Japan)	Tomy	★★★★
Twisted Metal	SIE	★★★★
Viewpoint	Electronic Arts	★★
Warhawk	Sony Interactive	★★★★
Wipeout	Psygnosis	★★★★
WWF Wrestlemania	Acclaim	★★★
X-Com UFO Defense	Microprose	★★★★★
Zero Divide	Zoom	★★★★
Saturn		
Astal	Sega	★★★
Battle Arena Toshinden	Takara	★★★
Battle Monster (Japan)	Naxat Soft	★★
Blackfire	Sega	★★
Bug!	Sega	★★★
Clockwork Knight	Sega	★★★
Clockwork Knight 2 (Japan)	Sega	★★★★
Cyberspeed	Mindscape	★★
D	Acclaim	★★★★
Dark Legends (Japan)	Data East	★★
Daytona USA	Sega	★★★★
Deadalus (Japan)	Sega	★★★
Double Switch	Digital Pictures	★★

Title	Publisher	NG Rating
F-1 Live Information	Sega	★★★★
Galactic Attack	Acclaim	★★★
Gotha (Japan)	Sega	★★★
Guardian Heroes (Japan)	Sega	★★★
Hang-On GP '95	Sega	★★★
Hi-Octane	EA	★★
High Velocity	Atlus	★★★
Johnny Bazookatone	US Gold	★★
Lost Gladiators (Japan)	Kaze Co	★★★
Mansion of Hidden Souls	Sega	★★
Mortal Kombat II	Acclaim	★★★
Myst	SunSoft	★★★
NHL All-Star Hockey '96	Sega	★★★
Off-World Interceptor	Crystal Dynamics	★★★
Panzer Dragoon	Sega	★★★★
Pebble Beach Golf Links	Sega	★★★
Rigford Saga (Japan)	Sega	★★★
Quarterback Attack	Digital Pictures	★★
Sega Rally Championship	Sega	★★★★★
Skeleton Warriors	Playmates	★★★
Shinobi Legions	Sega	★★★
SimCity	Maxis	★★★
SteamGear Mash	Takara (Japan)	★★★
Street Fighter The Movie	Acclaim	★★
Tama (Japan)	Tengen	★★★
Theme Park	Electronic Arts	★★★★
ThunderStrike 2	US Gold	★★★★
Virtua Cop	Sega	★★★★
Virtua Fighter	Sega	★★★★★
Virtua Fighter Remix	Sega	★★★★★
Virtua Fighter 2	Sega	★★★★★
Virtua Racing	Time Warner	★★★
Virtual Hydlide	Atlus	★★
Virtual Volleyball (Japan)	Imagineer	★
Wicked 18	Vic Tokai	★★★
Wing Arms	Sega	★★★
World Cup Golf Pro' Edition	US Gold	★★★
World Series Baseball	Sega	★★★★
Worldwide Soccer	Sega	★★★
X-Men: Children of the Atom	Capcom	★★★
3DO		
Alone In The Dark 2	Interplay	★★★★
Battlesport	Studio 3DO	★★★
Bladeforce	Studio 3DO	★★★★★
BC Racers	Goldstar	★
Burning Soldier	Panasonic	★★
Busta Move	Panasonic	★★★★

Title	Publisher	NG Rating	Title	Publisher	NG Rating	Title	Publisher	NG Rating
Cannon Fodder	Virgin	★★★★	Space Hulk	EA	★★★★	Supercross 3D	Atari	★
Captain Quazar	Studio 3DO	★★	Space Pirates	American Laser Games	★★★	Syndicate	Ocean	★★★★
Crime Patrol	American Laser Games	★★	Star Control II	Crystal Dynamics	★★★★	Tempest 2000	Atari	★★★★
D	Panasonic	★★	Starblade	Panasonic	★★	Theme Park	Ocean	★★
Deathkeep	SSI	★★★	Station Invasion	Club 3DO	★★★	Troy Aikman Football	Williams	★★
Demolition Man	Virgin	★★	Super Street Fighter II Turbo	Capcom	★★★★	Val d'Isere Skiing	Atari	★★
Drug Wars	American Laser Games	★★	Super Wing Commander	Origin	★★★★	White Men Can't Jump	Trimark	★★★
Family Feud	GameTek	★★	Supreme Warrior	Digital Pictures	★★	Wolfenstein 3-D	Atari	★★★
Flying Nightmares	Domark	★★★	Syndicate	EA	★★★	Zool 2	Viacom	★★
FIFA International Soccer	EA	★★★★★	The Daedalus Encounter	Panasonic	★★★	Zoop	Viacom	★★★
Flashback	U.S. Gold	★★★	The Last Bounty Hunter	American Laser Games	★★			
Gex	Crystal Dynamics	★★★★	Theme Park	EA	★★★	**32X**		
Ghost Hunter	Matsushita	★★★	Trip'D	Warp	★★	Brutal	Gametek	★★★
Guardian War	Panasonic	★★★	VR Stalker	American Laser Games	★★★	Corpse Killer	Digital Pictures	★★
Holt a Cyberpunk Thriller	GameTek	★★★	Way of the Warrior	Universal Interactive	★★★	Cosmic Carnage	Sega	★
Icebreaker	Magnet Interactive	★★★	Wing Commander III	EA	★★★★★	Fahrenheit	Sega	★★
Immercenary	EA	★★★	Wolfenstein 3-D	Id/Logicware	★★	Golf Magazine...Fred Couples	Sega	★★
Iron Angel of the Apocalypse	Panasonic	★★	World Cup Golf	U.S. Gold	★★★	Kolibri	Sega	★★★
Iron Angel: The Return	Panasonic	★★	Zhadnost: The People's Party	Studio 3DO	★★★	Knuckles Chaotix	Sega	★★
Jammit	Street Sports	★★				Metal Head	Sega	★★
John Madden Football	EA	★★★★	**Jaguar**			Mortal Kombat II	Sega	★★★
Killing Time	Studio 3DO	★★★	Alien vs Predator	Atari	★★★★	Motocross Championship	Sega	★
Kingdom: The Far Reaches	Interplay	★★	Atari Karts	Atari	★★★	NBA Jam Tournament Edition	Acclaim	★★★
Lemmings	Psygnosis	★★★★	Baldies CD	Atari	★★	Night Trap	Digital Pictures	★★
Last Eden	Virgin Interactive	★	Battlemorph	CD	★★★★	Pitfall: The Mayan Adventures	Acavision	★★★
Lucien's Quest	Panasonic	★★	Blue Lightning CD	Atari	★★★	Quarterback Club	Acclaim	★★
Mazer	American Laser Games	★★	Brett Hull NHL Hockey	Atari	★★★	RBI '95	Time Warner	★★
Mega Race	Mindscape	★★★	Bubsy: Fractured Furry Tales	Atari	★★	Shadow Squadron	Sega	★★★
Microcosm	T&E Soft	★★	Burn Out	Atari	★★★	Slam City with Scottie Pippen	Digital Pictures	★
Myst	Panasonic	★★★	Cannon Fodder	Virgin Interacow	★★★★	Star Wars Arcade	Sega	★★★
DB World Interceptor	Crystal Dynamics	★★★	Checkered Flag	Atari	★★	Super Afterburner	Sega	★★
Need for Speed	EA	★★★★	Club Drive	Atari	★★	Super Space Harrier	Sega	★★
Panzer General	SSI	★★★★	Defender 2000	Atari	★★★	Tempo	Sega	★★
PGA Tour Golf '96	EA Sports	★★★	Doom	Atari	★★★	Virtua Fighter	Sega	★★★★
PO'ed	Any Channel	★★★	Double Dragon V	Tradewest	★★	Virtua Racing Deluxe	Sega	★★★
Primal Rage	Time Warner	★★★	Dragon	Atari	★★	World Series Baseball	Sega	★★★★★
Quarantine	GameTek	★★★	Fever Pitch Soccer	Atari	★★	WWF Raw	Acclaim	★★
Road Rash	EA	★★★★	Fight for Life	Atari	★★★	Zaxxon's Motherbase 2000	Sega	★
Rebel Assault	Lucas Arts	★★★	FlipOut!	Atari	★★	36 Great Holes	Sega	★★★
Samurai Shodown	Crystal Dynamics	★★★	Highlander	Atari	★★			
Scramble Cobra	Panasonic	★★★	Hover Strike	Atari	★★★			
Seal of the Pharaoh	Panasonic	★★	Iron Solder	Atari	★★★			
Shanghai: The Great Wall	Acavision	★★★	I-War	Atari	★★★			
Shock Wave	Atari	★★★	Missile Command 3D	Atari	★★★			
Starfighter	Studio 3DO	★★★	Pitfall: The Mayan Adventures	Atari	★★★★			
Operation Jump Gate	EA	★★★★	Power Drive Rally	Time Warner	★★★			
Slam 'N' Jam '95	Crystal Dynamics	★★★★	Rayman	Atari	★★★			
Soccer Kid	3DO	★★	Ruiner Pinball	Atari	★★★			

111

now hiring

Next Generation
career opportunities section

Advertising Inquiries

(415) 468-4684 x156
Imagine Publishing, Inc.
150 North Hill Drive, Suite 40
Brisbane, CA 94005

now hiring online: http://www.next-generation.com/ng/nowhiring.html

Educational opportunities

Same RUSH. Better Pay!

If you're a graphic designer/animator: 3D, SGI, sound designer, sound programmer: C, C++, graphic/animation programmer: C, C++ assembly, make the a leap to Konami Computer Entertainment Chicago Inc. You're right in sight of what real creative freedom can do for you.

We're aggressive [...] American R&D arm of Konami [...] give you the kind of leading [...] [...]-oriented freedom [...] [...] in spades. Where [...] [...]

the rewards of a terrific pay and benefits package.

We're looking for the most outrageously talented people to come create in our state-of-the-art facility just outside Chicago. So send your resume and salary history to: Konami Computer Entertainment Chicago Human Resources Dept: (next), 900 Deerfield Parkway, Buffalo Grove, IL. 0089-4510, Tel 84 [...] or fax. 84 [...]

KONAMI

...Or come hang with us.

If you're thinking of ending your current situation, come talk to us. We're building a team of talented people who are focused on creating games that people can't get enough of. BOSS Game Studios is the new offspring of an Academy Award winning Hollywood special effects studio. And we need: ARTISTS with at least 2 years experience in 3D modeling and animation, character design, environment design or modeling. PROGRAMMERS with published game titles, C programming and assembly language experience and a college degree or equivalent. DESIGNERS with published game titles and a passion for video games.

Fax your resume to 206.556.0547 or e-mail to HUNG@BOSSGAME.COM. (Recruiters needn't bother.)

BOSS
GAME STUDIOS

Advertising Inquiries

(415) 696-1688 x156
Imagine Publishing, Inc.
1350 Old Bayshore Hwy., Suite #210
Burlingame, CA 94010

NEXT Generation
career opportunities **section**

now hiring online: http://www.next-generation.com/ing/nowhiring.html

now hiring

Solving the Mystery means Visiting the Dark Pit of your Soul.

"THE NEW GENRE OF INTERACTIVE HORROR!"—GAME FAN

"SLICK, STYLISH, SCARY FUN!" —GAME PLAYERS

"SPINE-TINGLING ACTION!"—EGM

D... the Daughter.
A full moon rises over L.A. National
D... Darkness.
Hospital. Inside-the father, a doctor
D... Destiny.
gone mad. Outside-the daughter...
D... Delirium.
the innocent, the seeker. You are about
D... Death,
to enter the darkness forever!
D... Damnation.

Buried within is a secret to D. Solve the mystery
and enter the D sweepstakes at participating retailers.
http://www.acclaimnation.com

3·5·96

ACKLAIM
entertainment inc.

TEEN

corresponding

We've moved! Inching perilously away from Silicon Valley and closer to San Francisco's "Multimedia Gulch", our new location offers panoramic views and an extra 10 minutes in bed. Our new address: 150 North Hill Drive, Brisbane, CA 94005. Fax us: (415) 468-4686. E-mail us: ngonline@imagine-inc.com

letters

Post modern

From what I gather, your publication is supposed to be aimed at a slightly older and more mature gaming population, to which I belong. I noticed while flipping through one of your issues that something seemed different regarding the ad for Wipeout for PlayStation. I found the same ad in a back issue of another gaming magazine and upon comparing the two, I noticed that your run of the ad censored (erased) the blood from the boy's and girl's faces and shirts. Please, you're playing to an older reader. I think we can handle a little fake blood. It's a small query but a valid one. Censorship is just another form of oppression.
James McGary
Short Hills, NJ

Those who compile the letters page were as puzzled as you to notice this, so we asked the powers that be why the ad was changed. Here's a (semi) official statement: "The Wipeout ads arrived at the **Next Generation** offices just days after an extended debate with one of the nation's key retailers concerning violent and misogynistic images in game magazines. On several occasions in 1995 game magazines were removed from newsstands because of complaints about such images (although **NG** was not one of them). On seeing the 'bloody' version of the Wipeout ad we decided, unilaterally, not to print the ad with the blood. Not only were we concerned about having **Next Generation** pulled from retailers, but also there was a general feeling among people here that the ad actually gained little — other than shock value

— from the blood.

"**Next Generation** is opposed to censorship in its most insidious forms and we are extremely aware of the maturity and intelligence of our readers. Indeed, our take on this incident is not that we were patronizing anyone, but that any advertiser who thinks a splash of blood and shock tactics will be enough to make an **NG** reader buy their game is fooling himself!"

So that's the official line. Blood, who needs it?

When I read that Sony would be trying to appeal to a more sophisticated audience, I was eager to invest my hard-earned $300 in a PlayStation. I was, to say the least, disappointed to find games that were obviously

Burn:Cycle was short on gameplay, but had adult themes

developed and packaged to appeal to an adolescent audience. No doubt Tekken, Wipeout, and Toshinden are entertaining, but their none, perhaps stimulating to children and the "nerd audience," is condescending and insulting to adults. Perhaps more of what I was looking for were games like Phillips' Burn:Cycle, which falls

short on playability, but at least had an adult theme and storyline. Your preview of releases through 1996 didn't suggest that Sony was heading this direction. For now, my PlayStation is serving as an expensive CD player.
Marcus L. Wilson
Louisville, KY

Sad but true. Nowhere in this industry, especially for consoles, do we see titles attempting a mature, thoughtful treatment of any kind of subject matter, leaving a noticeable lack of game analogs to a film like Dead Man Walking or a TV show like "Homicide." Even within genres that games tend to follow, fantasy and science fiction, there's none that approach the depth of a film like Blade Runner (the closest gaming ever came was a text adventure by Brian Moriarty, A Mind Forever Voyaging, released by Infocom in the mid-'80s). Of course, pop culture as a whole hasn't shown a lot of maturity for at least the last 10 years, but even if a relatively small number of movies and TV shows take the serious approach, that still shames the rampant, prolonged adolescence the game industry has shown. It's worth pointing out that the game audience is aging, and might begin clamoring for more thoughtful subject matter — let's hope so.

I'm sick and tired of you illiterate videogame magazines raging on Atari and Jaguar, despite the recent slew [sic] of good and great titles for this nice little system. Yeah, Atari has made plenty of mistakes, but since Ted Hoff came on board, there's been much better software coming at

a much faster rate. If you ever resume covering the Jag fairly, I might buy another copy of your magazine. Until then, I find the Internet the best place for good Jaguar information.
Jerry Danzig
PSFT55A@prodigy.com

And so on. Ted Hoff is gone. Jeff Minter is gone. Atari has taken up residence in a tiny office. It has no developers. The fat lady is on stage. The microphone is plugged in. The aria has begun. We at **Next Generation** suggest the "Lisbestod."

Do you know if there's a chance that a Final Fantasy or Chrono Trigger game might come out for the PlayStation? SquareSoft RPG's are my favorite games, and I don't want to have to buy a whole new system (Ultra 64?) to play them.
Maggie Owens
Rogers, AK

Your prayers have been answered. As we reported last month, for a number of reasons, including SquareSoft recently going public, and its general disappointment with both Nintendo 64 hardware and the cost of releasing a large RPG on a cart-based machine, Square began negotiations with Sony. Since then the deal has been officially finalized, and work on Final Fantasy VII for PlayStation is well underway. The game is scheduled for a November release in Japan, with a US release (presumably under the title Final Fantasy IV) tentatively planned for mid '97. Also, conversations with some key personnel at Square suggest they

corresponding

may try porting some older games to other platforms, including PC, bundling several titles on single disc, but no final decisions have been made.

In your November '95 issue you said that Hirokazu Yasuhara is the creator of Sega's Sonic the Hedgehog, but in my August-September issue of Sega Visions, a game magazine produced by Sega, there was an interview with the creator of Sonic the hedgehog, and his name was Yuji Naka. So, can you please tell me who the real creator of Sonic is? Who should I believe?

Eddie Rivera
Santa Ana, CA

Kinda confusing, yes? It gets worse. Hirokazu Yasuhara came up with the basic concept for the game — very simple game mechanics (one button!), and a fast-moving character to go along with a new data processing routine he'd invented that would eventually be touted as "blast processing." Yuji Naka was the lead programmer and level designer for both Sonic and Sonic & Knuckles, creating many of Sonic's trademark loops, jumps, and other feats of speed. However, the actual character of Sonic the Hedgehog was invented by a guy you don't even mention named Masato Oshimo. Does that make it clear, or just muddy everything even more? Ah, the hell of collaborative effort...

Finally, a magazine with which I am in agreement! Merely 20 minutes after purchasing Viewport for the Sony Playstation, I returned the game having decided that it was much too slow and really a bit overdone. This opinion was in contrast to every other game magazine on the racks, except Next Generation, which attributed the difficulty of the PlayStation port to a team with a sadistic streak a mile long (I'm paraphrasing, a lot).

Congratulations on being one of the few publications that actually leads the game before reviewing it!

Travis Prebble
tprebble@efn.org

You gave Vic Tokai's Criticom two stars. In your review you commend the original character designs, but in fact, excluding the original eight, there are an additional 16, since each character changes in appearance as they increase in rank. I spent two hours with one character to find this out. Did you spend this much time? If not, how long do you play a game before you give it a complete review?

Joseph McCollum
Orlando, FL

Next Generation makes a policy of spending as much time as humanly possible with a title before evaluating it for the finals section (case in point, as long as we're talking about the Criticom review, even to the point of turning the piece in late). We take our jobs very seriously and each conclusion, whether good or bad, is reached only after careful evaluation. Whether you agree or not is up to you, and there have been some controversies, but in the end, if you're satisfied with your purchase, that's all that matters — if you find yourself taking it back in disgust, don't say we didn't warn you.

You are so full of speculation. Why would Nintendo won't let the world see its big surprises? Look at your clues. George Zachary says specifically that he didn't know why Nintendo did not turn on the tri-linear mip-mapping and anti-aliasing, when he has seen it run. It would appear that even though Nintendo did show the big game, It still held out. Why? It wants to shock the game industry, not lose gamers into a new era. If it had one hundred fully functioning units on display, wouldn't that suggest that manufacturing is in full force? Don't doubt Nintendo because it has had some delay problems with the Ultra 64. It will be out on the shelves soon, and it will be incredible.

Tyler LaGrange
bigsixty@aol.com

After reading your article on Nintendo's Ultra 64, I think several issues concerning it need to be addressed. First, if the technologically inferior Saturn and PlayStation cost $320 and $270 to produce, surely Ultra 64 has to cost the consumer more than $250? Second, how much are Ultra 64 games going to cost? I have read reports of up to $100 — how can Nintendo justify using a medium that cost this much when PlayStation games cost around $45? For example, I just purchased NHL Face Off for PlayStation on a CD-ROM at $46.99, while EA's NHL '96 for Genesis, a cart, was $69.99. Third, how much will the joypad cost? Putting the memory card in the controller sounds good until you think about the fact that it has to add cost, and further, controllers break. Lastly, Nintendo censors its games — how can anyone support a company that decides what the purchaser can or cannot view?

Larry Rocconi
BADROCK316@aol.com

Our Shoshinkai coverage and Nintendo's long-awaited unveiling of Ultra 64 turned out to be a great source of "proof" for the Nintendo faithful and detractors alike. Since then, Nintendo has changed the name to "Nintendo 64" for all markets, and delayed its domestic release, again, until

Nintendo will repeat history, delivering N64 when it's ready

September 30. It's clear the final chapter in the long N64 "vaporware/ wonderware" saga is long from being written. Next Generation, as always, will continue to report the news as we see it. Any conclusions

you draw from the information are your own.

You know for a while there. I thought you guys were nuts. You just kept putting down platform games simply because — well, they were platform games. But I've figured it out now! In each case they were talking about Acclaim's platform games!

Well, let me really clarify: Acclaim games are not platform games. In platform games, you can jump up — or down — onto various different levels, and explore up, down, left and right. Now Acclaim games do have little platforms you can stand on, about a quarter of the way up the screen, but usually there's no reason to. Therefore, Acclaim games are more properly called TUNNEL games. You're in a tunnel, with no branches, no windows to see out, no forks, just an occasional shelf, and you get to run — one way — through this tunnel (maybe it would actually be better if we called it a tube).

You see, you should be more clear about these things, then I wouldn't have ignored you and actually bought one of those games. Ah, but I learned (well, it was only 10 bucks, anyway).

Bloodsong
sphynx@genie.com

We sincerely apologize for any inconvenience our sloppy terminology may have caused. There really is no excuse. In future editions of the NG Lexicon, we will be sure to include entries for "One-Way Tunnel Games," and "Licensed Tube Games."

CORRECTION: In our article on How to Get a Job in the Game Industry (NG 15), an editing mistake resulted in Interactive Development, a recruitment firm, being listed under Company Contacts. The company should have been listed with the other recruitment firms, Company Contacts. You can reach Interactive Development at (213) 460-4900 or via email at seanlord@aol.com. We regret the error.

Your Image
Of A Brutal Sport
Is About To Be
Shattered

HYPER
BLADE

Prepare For The Ultimate Body-Check Of The Future

HyperBlade. The ultimate sport. Fueled by the blistering intensity of sports from the past:
hockey, lacrosse and speed-skating — to deliver the mega-sport of the 2000's. Battling
ruthless players and vicious teams in a world where brutality leads to victory.

Face-off into the future at http://www.activision.com.
Developed by WizBang! in collaboration with Activision.

The Drome Opens Summer '96.
Available on MS-DOS®/Windows®95 CD-ROM.

ACTIVISION.

The way games ought to be...

Hi-octane game theory by **Chris Crawford**

Are you a winner or a loser? And how do you tell the difference between the two? And how come even the "best" games are so darned simple to beat?

Let us consider the gameplaying process as story-generating process. That is, a game is a machine that grinds out a custom story for the player, each time he plays. Now, most games generate inspid stories that few would compare with hand-crafted stories. In this article I will not ask how we might correct this problem. Instead, I propose only to examine the gameplaying process as a sequence of stories.

I shall use as my working example (once again) *Doom*, for the same reasons that I have used it before: almost everybody has played the game and so most people are familiar with it. Moreover, I have praised the game design, so I need not waste anybody's time on the diplomatic niceties.

The example I'd like to zero in on is in *Doom II*, in a level called "Barrels O' Fun." This is a particularly clever level because there are two places where rows of barrels are set up to explode in a chain reaction that will kill the player if he doesn't find shelter. OK, that's clever. But consider the precise sequence of stories that the player must go through until he finds a story with a "happy ending":

Story One

Well, here I am in a new level called "Barrels O' Fun." It sounds interesting. I see lots of barrels all around me. I'll very carefully just look around and... Omigod, I must have tripped a secret latch. A door has opened and I can hear the growl of a monster! Where is he? Hey, he just shot at me and a barrel blew up! Now more and more barrels are blowing up! I'm dead!

Story Two

OK, this time I'm ready. I know that as soon as I move more than a couple of steps, I'll trip the secret latch and the monster will come. So this time I'm going to get him first. I'll just face in the correct direction and edge closer...closer... Yes, there he is! But there's a barrel between us! If I shoot, I'll set it off! Oh no, he's shooting, the idiot!

The barrels are exploding! I'm dead!

Story Three

I'm not sure what to do because I can't shoot back and I can't seem to escape the exploding barrels. But I do notice an empty space where there aren't so many barrels so I'll just duck into that. Whoops, here comes the bad guy. The barrels are blowing up. Augghh, there are still too many barrels — they're all blowing up again. I'm dead!

> Experienced PC gamers have come to regard the save-die-reload cycle as a normal component of the total gaming experience. I want to slap all these people in the face and cry, "Wake Up!"

Story Four

Well, I don't know what to do. There appears to be no way out of this. But this is a long, long room; perhaps if I go to the other end I'll find some way out of this mess. OK, let's start running. Drat, the barrels get in the way. Uh-oh, the monster started shooting, I can hear barrels exploding. I'd better run faster. Look, there's a doorway up ahead! Maybe if I get through that... augghh, the exploding barrels caught up with me! I'm dead!

Story Five

Well, we now know that there's a doorway at the end of the long room, and I think that if I can make it to the door, I might find safety inside. So this time I'm going to run as fast as I can toward the doorway. Let's go! Monster coming out... I'm stumbling a

bit... barrels exploding... I've got a good lead... almost there... here's the doorway... augghh, Oidn't make it! I'm dead!

Story 6

Let's try again. Here we go... running fast... maneuvering around those barrels well... the monster seems to be slow off the mark... there he goes... yes, barrels are exploding... I've got a huge lead... just don't make any mistakes now... almost there... explosions getting closer... at the door now... open it up... I'm through! Explosions have stopped! It's over! I made it! Hooray! I'm not dead!

Now here's the question: is this five stories with unhappy endings followed by one story with a happy ending? Or is it one long story of triumph over adversity? Now you may think that this question is arbitrary, that *is* strictly a matter of perception, and in fact, it is largely a subjective matter. But my point concerns the person making that subjective judgment. If that person is an old pro gamer, then it's easy to take the second interpretation. The various deaths along the way were merely intermediate steps on the path to triumph. They make the success all the sweeter.

But what if you're not an old pro gamer? What if you consider dying to be the same as losing? You'll have to lose five times before you win. And the question is, how many times are you willing to lose before you give up? Can you take all those unhappy-endings to achieve the happy one?

Experienced PC gamers have come to regard the save-die-reload cycle as a normal component of the total gaming experience. I want to slap all these people in the face and cry, "Wake Up!" What they regard as business-as-usual has a completely different meaning for most people. For most people, death means failure, losing, end-of-game. It doesn't mean time-out, lose-a-turn, or reload. When we design games that kill the player repeatedly, most people don't get the message that the game is challenging; they get the message that they're dummies who can't survive 10 seconds in a child's game.

Next Month

The way games ought to be...

I offer the following design criterion for your consideration: Any game that requires reloading or starting from the same place over and over again as a normal part of the player's progress through the system is fundamentally flawed. On the very first playing, even a below-average player should be able to successfully traverse the game sequence. As the player grows more skilled, he may become faster or experience other sub-challenges, but he should never have to start over after dying.

Indeed, this raises a new question: should we banish death from our games? Why must we kill the player when we all know perfectly well that he will merely reload or restart the game again? Why should we force the tedious process of reloading or restarting upon him? And why should we require the even more tedious task of frequent saves? Why not use the computer to handle the tasks? If the player makes a mistake, then we automatically take him back to the most recent starting point and let him try again. The result in terms of gameplay is exactly the same, except that the player no longer has to deal with the petty issues of file management. Isn't that what computers were made for?

But there are even larger questions raised by "Barrels O' Fun." This level is one of the most complex and sophisticated challenges in one of the very best games of the 1990s, yet it presented a challenge that was easily solved by nothing more than near

What can we say about a design that challenges a person's willingness to resort to trial and error? Shouldn't a game challenge something deeper inside us?

brainless trial and error. It didn't require any great insight on my part to solve the problem, no stroke of genius or flash of inspiration got me through. Instead, it was just brutal trial and error until I muddled through. What can we say about a design that challenges a person's willingness to resort to trial and error? Shouldn't a game challenge something deeper inside us? I think so.

ng

Is Microsoft trying to take over the game industry?
America's most powerful man in the **Next Generation** interview

NEXT Generation #18
on sale May 21, 1996
Real gamers have already subscribed. To find out how you too can save money and guarantee your copy, turn to the insert between pages 32 and 33.

All The Brutality, Carnage And Senseless Violence Of Darkstalkers.™

Only Darker.

Just when you thought the Darkstalkers had reached their ultimate evil, they're back with a chilling twist. Night Warriors ™ features new secret moves, multi-hit combos, dazzling animation and even shadier characters in the year's most eagerly anticipated release. Now, you'll have a terrifying encounter with 10 of your treacherous favorites while battling for your life with new or previously unplayable characters. So get ready to defend yourself against a world of deadly powers. You might survive to see the light.

NIGHT WARRIORS
™

CAPCOM®

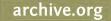# This magazine was scanned by Vanamo Media

This is a not-for-profit scan meant to preserve video gaming history. Magazines run a serious risk of being lost to time, so please share and host this scan.

RETROMAGS

archive.org

The Vanamo Online Game Museum